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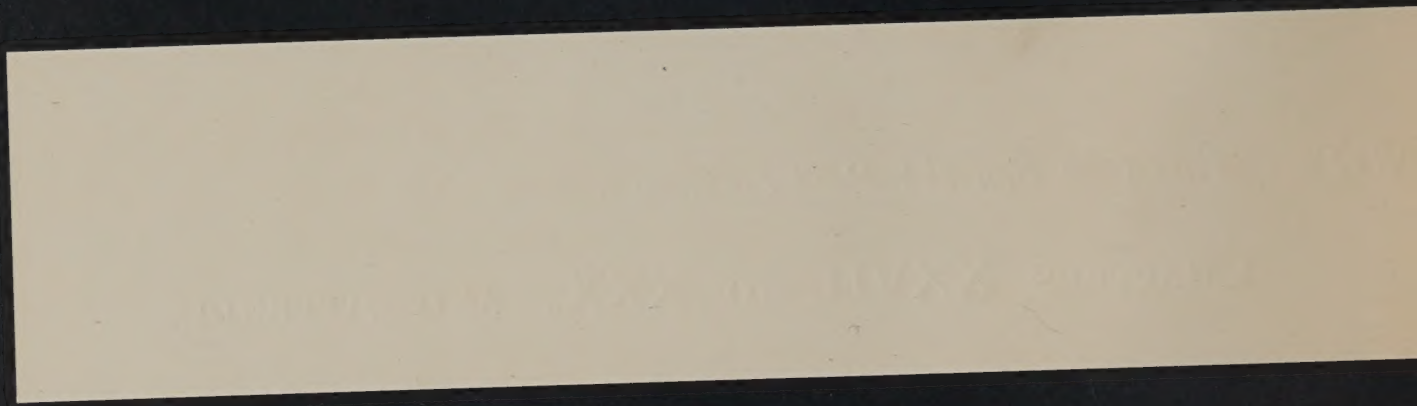
ARGENTINE-CHILIAN BOUNDARY





*NOTE: This (the Fourth) Part contains—*

CHAPTERS XXVII. TO XXX., AND APPENDIX.





Argentine-Chilian Boundary



# REPORT

PRESENTED TO THE TRIBUNAL APPOINTED BY HER BRITANNIC  
MAJESTY'S GOVERNMENT "TO CONSIDER AND REPORT UPON  
THE DIFFERENCES WHICH HAVE ARISEN WITH  
REGARD TO THE FRONTIER BETWEEN THE  
ARGENTINE AND CHILIAN REPUBLICS"

TO

JUSTIFY THE ARGENTINE CLAIMS FOR THE BOUNDARY  
IN THE SUMMIT OF THE CORDILLERA DE  
LOS ANDES, ACCORDING TO THE  
TREATIES OF 1881 & 1893

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*Printed in compliance with the request of the Tribunal,  
dated December 21, 1899*

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## CHAPTER XXVII.

- Summary*—1. ANTECEDENTS ON THE BOUNDARY LINE NEAR PARALLEL 52° S. LAT.  
2. GENERAL CONFIGURATION OF THE GROUND.  
3. REMARKS ON THE ARGENTINE AND CHILIAN PROPOSED BOUNDARY LINES.

### 1. ANTECEDENTS ON THE BOUNDARY LINE NEAR PARALLEL 52° S. LAT.

THE chapter which the Chilian Representative devotes to “the demarcation on the territories near parallel 52°,” is one of the most conclusive proofs of the tendency shown in the Statement that he read before the Tribunal to keep aloof from the Covenants in force. Treaties, Records, official declarations of both Governments are wholly disregarded in it, and the theory of the continental divide is again put forth as the paramount principle in the delimitation. In fact, it is maintained in that Statement that there is no other rule for marking out the boundary in the neighbourhood of the above-mentioned parallel, than that which the Treaty of 1881 determines, and which, according to the Chilian Expert, is the line of separation between the interoceanic hydrographical basins. Such views are clearly expressed in the following passages :—

“Although the demarcation of the boundary in all the extent of the frontier from parallel 26° 52' 45" down to parallel 52° S. lat. is submitted to the same geographical principle of the water-divide, *it has been attempted* to raise a separate question with respect to the region in the neighbourhood of 52° S. lat. On this account, a shorter chapter will be devoted to the special point of the boundary dispute between Chile and the Argentine Republic. . . . Indeed, as Article 2 of the Protocol just quoted *does not provide for a new principle of demarcation*, it is hardly necessary to observe that the principle of the water-parting line provided by the Treaty of 1881 does not cease to be imperative as long as there is no absolute impossibility to its being applied. . . . In maintaining that on the land situated to the north of parallel 52° the delimitation must be made by the natural line of the *divortium aquarum* between the two oceans, Chile does not claim anything else than the faithful and exact fulfilment of the Treaty of 1881. She bases her right on the spirit and on the letter of Article 2 of the Boundary Treaty of 1881, and strengthens it with the explanation given by the distinguished Señor Yrigoyen—the negotiator and signatory of this Treaty—before the Argentine Congress.”

In these paragraphs, by huddling together several propositions, a confusion has been made, which it is necessary to dispel, though incurring the risk of tautology, since the clauses in the Agreements, connected with the boundary line in the region under consideration, have been analysed elsewhere in this Report. The exact conclusions to be derived from the said clauses are :—

1. That, though it is said in the Chilian statement that “it has been attempted to raise a separate question with respect to this region,” the truth is that the Treaties have really raised such separate question, and that the Chilian Government themselves have considered it a separate question.

2. That, though it is said in the Chilian statement that the Protocol of 1893 “does not provide for a new principle of demarcation” in regard to this zone, the truth is that, in the last part of Article 2 of the Protocol there are special provisions which the Argentine Expert clearly determined in the Records.

3. That, if Chile only claims the fulfilment of the Treaty of 1881, she sets aside, without any reason, the other Treaties, which cannot be disregarded, since they all have the same compulsory force.

4. That, if Chile only claims the fulfilment of the Treaty of 1881, and strengthens it with the explanation given by Señor Yrigoyen before the Argentine Congress, Chile, to be consistent, ought to renounce a part of the inlets near parallel 52° S. lat., since it is a fact that Señor Yrigoyen explained before the Argentine Congress, quoting the opinions of the present Argentine Expert, that a part of those inlets remained under the dominion of the Argentine Republic, in accordance with that Treaty.

5. That the Treaty of 1881 does not determine as the boundary line between the two Republics, anything similar to the continental divide, but on the contrary, it sanctioned the traditional limit along the summit of the Cordillera de los Andes, from north to south as far as 52° S. lat.

It is not necessary to insist upon this last conclusion, which has been so often repeated, but it is not superfluous to recall the antecedents leading to the other four consequences, as they explain why a part of the frontier line to be dealt with in this Chapter must run to the east of the Cordillera de los Andes.

The Chilian occupation of the Brunswick Peninsula in 1843, as has been said, gave rise to the boundary question between the two countries. During the course of the controversy the Argentine Republic contended that her western boundary from north to south was the summit of the Cordillera de los Andes



Though Chile accepted this limit to a great extent, she claimed that it did not rule in the southern part, and went so far as to raise the question of a right over the whole of Patagonia. According to Argentine opinion, the divergence ought only to be considered as a mere geographical matter, confined to the inquiry as to the true situation of any disputed area with respect to the Cordillera de los Andes.

The maps of the time did not agree respecting the situation of the Cordillera; the majority of geographers thought that the range ran from north to south as far as the neighbourhood of Cape Horn, while others indicated as being the Cordillera a mountainous region east of the Peninsula of Brunswick, to the north of the Magellan Straits. The British Admiralty Chart showed, under the name of Gregory Range, the edge of the general Patagonian tableland which gradually runs from east to west. In the sketch map showing Captain Muster's route across Patagonia,\* the Cordillera has been depicted to the east of Obstruction Sound extending up to the Straits, "Gregory Range" and a volcanic range being to the north. It was indeed known that the Cordillera de los Andes in 52° S. lat. was cut through by various gorges by which the waters of the longitudinal channels of the Pacific flow towards the east, and by a narrow defile have access as far as the eastern plains, outside the Cordillera. Some were also of opinion that the ridges of the Cordillera extended to the south, occupying not only the isthmus which separates Otway Water from the Magellan Straits, but extending its ramifications as far as Cape Vírgenes on the Atlantic coast. There was no accurate information before 1870 as to the geography of the centre of Patagonia to the south of the Santa Cruz river.

In 1872, the Argentine Government proposed to that of Chile, as a compromise of the question at issue, that the divisory line in the extreme south should run from the Cordillera de los Andes, through the Fitzroy Channel, to the Straits of Magellan, crossing the isthmus between Otway Water and Peckett Harbour to the north-west of Punta Arenas (Sandy Point): but this suggestion was not accepted. Nevertheless, the Chilian Government never expressed any doubt as to the Argentine sovereignty to the east of the Cordillera de los Andes, neither has the Argentine Government at any time thrown doubt upon the Chilian sovereignty to the west of that Cordillera. The Chilian Representative has quoted in vain some words used by the Argentine Minister for Foreign Affairs in 1873,

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\* Muster., *At Home with the Patagonians*, London, 1871.

Dr. Tejedor, stating that where the Andean Cordillera ceases "at parallel  $41^{\circ} 10'$  S. lat., the boundary would be the line dividing the waters flowing down towards both seas, taking for this purpose the middle between the points where sources or traces of waters are found, and to the south ending this line, the most prominent point of the continent, i.e. Cape Froward more or less on  $53^{\circ} 30'$  S. lat." This passage has not the importance assigned to it, as undoubtedly when speaking of parallel  $41^{\circ} 10'$  S. lat., a simple printer's error has been committed.\*

The Chilian Government had proposed to divide Patagonia into two sections, leaving to Chile the whole region lying to the south of Puerto Deseado, from which point a line might be drawn following the course of the river Deseado, until it reached the Cordillera de los Andes; so that in Patagonian territory, this chain of mountains should be the eastern boundary of Chile and the western of the Argentine Republic. To this the Argentine Government did not agree, and through their Minister Plenipotentiary in Chile, Señor Félix Frías, proposed as an alternative that the starting point of the dividing line should be in the Straits of Magellan, at Peckett Bay, the line to run thence in a westerly direction, until the Cordillera de los Andes was struck. "In this manner," stated Señor Frías, "Chile would have possession of the whole of the Brunswick Peninsula, where the colony of Punta Arenas is situated, and where she would find all the elements necessary for her development."

The Argentine Minister for Foreign Affairs, who made this proposal in the name of his Government through the intermediary of the Argentine Plenipotentiary in Chile, was the same Dr. Tejedor, quoted by the Chilian Representative, and therefore it is absurd to suppose that he understood that the Andean Cordillera ended at  $41^{\circ} 10'$  S. lat. He assuredly referred to a point in  $53^{\circ} 10'$  S., close to the isthmus between Peckett Harbour and Otway Water.

In 1876 the Minister for Foreign Affairs of the Argentine Republic, Dr. Yrigoyen, and Señor Barros Arana, Minister Plenipotentiary of Chile in Buenos Aires, tried to settle the boundary question.

Señor Barros Arana, afterwards appointed Chilian Expert, was among those who accepted that a bifurcation of the Andes extended as far as Cape Vírgenes; that the Cordillera de los Andes, the traditional boundary, formed a natural barrier between Chile and the Argentine Republic; and that therefore the

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\* See page 78 of this Report.



territory south of that bifurcation was supposed to be Chilian, comprising the Magellan Straits. The Minister Yrigoyen did not agree with these last conclusions. The most competent geographers affirmed that the Cordillera de los Andes ran from north to south as far as the neighbourhood of Cape Horn, and consequently the colony of Punta Arenas being to the east of the Cordillera, was in territory belonging to the Argentine Republic.

The basis for the proposed settlement of 1876 projected, as the boundary between the two countries, a line starting from Mount Dinero (52° 10'), and continuing from this point over "the *highest elevations of the chain of hills*, which extended westward as far as the height named Mount Aymond in lat. 52° 10'." This line would then pass from that point until it reached the Cordillera de los Andes, which was considered as situated to the west of Obstruction Sound. (See pages 158 and 236, footnote.)

Though this project was not accepted by the Chilian Government, it is necessary to mention it, because therein it is stated that the line must be carried as far as the Cordillera de los Andes, of which the geographical situation in that region was then known. The colony of Punta Arenas or Sandy Point was indeed to the east of the Cordillera, and the isthmus between Otway Water and Peckett Harbour, instead of being formed by the Andes, was recognised as formed by the fluvio-glacial drift, in which evidence of the recent rising of the ground above the level of the sea was visible, and it was understood that the Andean spurs did not extend as far as Cape Vírgenes, as some isolated volcanic hillocks existing there have no connection at all with the Cordillera. As to Gregory Range, it was accepted that it was the edge of the general Patagonian tableland, which, seen from the south, has been taken for true hills; just as later on was the case with the tableland north of the valley of the river Gallegos, converted in the Chilian maps into the "*Latorre Cordillera*," and as in the valley of the Carrenleufu where, as has been said, the edge of the same tableland was taken by the Chilian explorers Señores Serrano Montaner, Steffen and Fischer for an eastern chain of the Cordillera. Mount Dinero is only the result of a denudation of the low tableland on the east, being of the same origin as other elevations shown in the charts near the Straits.\*

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\* Moreover, Señor Barros Arana continued to maintain that the Cordillera de los Andes extended as far as Cape Vírgenes, as is shown in the documents of the time. The Argentine Minister for Foreign Affairs, Señor Rufino de Elizalde, in a Memorandum published in 1878 (Buenos Aires), said: "I refer to the clause

As regards the western region, two Chilian expeditions were despatched, to survey the territory between Otway Water and the sources of the river Santa Cruz in the Cordillera, and it has already been seen (Chapter VI.) that Señores Rogers and Ibar who led the expeditions, readily acknowledged that to the east of Obstruction Sound *there are only lowlands, that the Cordillera de los Andes lies much to the west between parallels 50° and 52° S. lat., that there exist rivers and lakes the outlets of which were either through the Cordillera to the western channels or else in Last Hope Inlet, and that those rivers and lakes are all situated to the east of the said Cordillera.* With this knowledge there was signed the Treaty of 1881, now in force, its second Article providing—

Article 2.—“ In the southern part of the Continent, and to the north of the Straits of Magellan, the boundary between the two countries shall be a line which, starting from Point Dungeness, shall be prolonged overland as far as Mount Dinero; thence it shall continue westward, following the highest elevations of the chain of hills existing there, until it strikes the height of Mount Aymond. From this point the line shall be prolonged up to the intersection of meridian 70° W. with parallel 52° S., and thence it shall continue westward, coinciding with this latter parallel as far as the *divortium aquarum* of the Andes. The territories lying to the north of said line shall belong to the Argentine Republic, and to Chile those which extend to the south, without prejudice to the provisions of Article 3, concerning Tierra del Fuego and the adjacent islands.”

According to this Article, the Argentine Republic had access to the inlets situated on the east of the Cordillera; so clearly indeed was this stated that in 1888 Chile proposed to found a colony to the west of the place where the main chain is cut by Kirke Narrow, without for a moment wishing to advance to the more useful lands to the north and east of Last Hope Inlet.

The parallel of 52° S. lat. cuts the inlets referred to, and then passes to the *divortium aquarum* of the Andes, that is, the summit of the Cordillera de los Andes, since the *divortium aquarum* of a chain of mountains is the general line of the crest which separates the waters descending by its two main slopes, as was recognised by both Argentina and Chile.

In 1881 it was not contemplated that the part of these channels which would remain in Argentine territory would prove a hindrance to the delimitation of the frontier. The labours of the explorers in the Chilian gunboat

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of the Treaty (of 1878) which establishes that the divisory line is the Andes, in the manner determined by Art. 1. . . . This rule, *without any exceptions, was the basis of my negotiation: so clearly was this the case that Señor Barros Arana, submitting to it, in his private bases of agreement, depicted the Andes running to Cape Virgenes as a reason on which to found his claim* ” (that the Magellan Straits should be considered as Chilian).



‘Magallanes,’ were well known and made public in Chile ; they had been officially announced, and it occurred to no one at that moment that the boundary there could not be the Cordillera de los Andes.

Chile, therefore, when framing the Treaty, was perfectly aware that according to it part of the mentioned channels would correspond to Argentine dominion, and the Argentine negotiator, Señor Yrigoyen, referred to that dominion when asking for the Parliamentary approval of the Covenant. As has already been stated, he said :—

“ And now that we are referring to ports, I will say that, whilst I am persuaded that by the Agreement of July we do not deliver up ports on the Atlantic, I think it probable that the Republic acquires them in the waters which flow to the Pacific ; and this view is borne out by Fitz-Roy’s maps, so greatly recommended in this discussion. The examination of these maps, and the reports which I have collected, show that the line determined upon by the Treaty cuts through the great Last Hope inlet or bay, and Obstruction Sound, leaving the first to Argentina and the second to Chile. I am assured that the first-named bay and Wesley Bay, which also remains to Argentina, offer good ports and anchorages, which will serve in time for the needs of the population, or of the industries which may be established in those places. I have consulted the opinion of Señor Moreno, and will take leave to read the notes which he has been good enough to hand me. ‘The Treaty which specifies the 52° for the southern boundary of the Argentine territory, and the Cordillera de los Andes for the western, allows of our having ports in the waters of the Pacific.’ ” \*

It is thus clearly shown that if Chile could only invoke as an argument in favour of her dominion over the channels near parallel 52° S. lat., the one which is put forth in the Chilean statement, i.e. the wording of the Treaty of 1881 and the explanation given before the Argentine Congress by Señor Yrigoyen,—the natural consequence to be derived from it would be to recognise the existence of Argentine ports in the waters of the Pacific. Though this would be the logical result of the erroneous Chilean statement, it must be said that Chile has another better and safer reason for claiming the ownership of the channels. The Argentine Republic acknowledges that reason, contending that the boundary must be traced so as to leave in Chile only the coasts of the inlets, as the Expert Dr. Moreno traced it.

In 1884 Señor Alejandro Bertrand published, by order of the Chilean Government, a map for the use of primary schools, and including the latest information. This map, which was approved by the Hydrographic Department of Chile, shows the dividing line as descending from the Cordillera to

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\* See page 172, footnote.

Obstruction Sound and Last Hope Inlet. In it, the boundary specified in the Treaty of 1881 was altered, but the line was drawn so as to leave within Chilian territory only the coasts of the inlets.

The author of this official map was undoubtedly acquainted with the publications of the Hydrographic Department of Chile, which had been issued *previously to the Treaty of 1881*, containing the journey of Señores Rogers and Ibar, which clearly showed that a vast area to the east of the Cordillera, and to the east and north of these inlets, was watered by streams flowing into them. The sanction of the Chilian Hydrographic Department was authenticated by the signature of the Director, Señor Francisco Vidal Gormaz, leaving no room for the slightest doubt as to the fact that, at that time, Chile did not claim any more land than the coasts of these inlets to prevent the Argentine Republic having access to the Pacific by the sea.

Chile did not hasten to decide upon the actual execution of the Treaty, as had been proposed by the Argentine Republic, and therefore the moment had not arrived to apply it in that part. Only in 1884 for the first time, a tendency to modify the spirit of this Treaty was officially alluded to. Señor Alejandro Bertrand was charged "to explore Chilian Southern Patagonia, between parallel 52° S. and the Straits of Magellan," he being entrusted, among other things, with the "formation of a chain of triangles by taking bearings between the more prominent summits and eminences, *especially in the neighbourhood of parallel 52° between the Cordillera de los Andes and Mounts Aymond and Dinero.*"

Señor Bertrand carefully fulfilled his mission, and it is proper to quote his work, as it has been referred to by the Argentine Expert in the Record of September 1, 1898. Until 1883, as before stated, no doubt whatever had arisen respecting the dividing-line upon the summits of the Cordillera de los Andes. Both the Chilian and Argentine Governments recognised these summits to be the boundary: the *divortium aquarum* of the Andes was the line of separation of the waters of these summits descending by the two slopes. Chile spread out to the west of the summit of the Cordillera, the Argentine Republic to the east. The fact that the summit line was cut by waters flowing into the Pacific was a matter of little importance: the line agreed upon over the crest of the range was intended to cut these watercourses.

Señor Bertrand,\* describing the general aspect of the central Magellanic region, and referring to the Cordillera de los Andes, stated:—

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\* A. Bertrand, Memoria sobre la Región Central de las Tierras Magallánicas, Santiago, 1886.



P. 71.—“The principal summits of the Cordillera de los Andes do not present themselves to view in a straight line, not even in an unbroken one; rather are they scattered at haphazard, some of them on the ridge of the chain, the greater part on the western slope (vertiente occidental), and some on the eastern. This irregular disposition which is noticed in the continental portion, is more pronounced in the insular region, and becomes more and more so proportionately as the latitude increases; further, the general trend of the chain, which forms a small angle to the north-east of the meridian up to the Cape Tres Montes, becomes at 47° S. lat. parallel with that meridian, as far as 50° S. lat., and from thence describes a curve of about a quarter of a circle as far as Cape Horn. The land covered by the Cordillera and all its ramifications, is 60 or 70 kilometres in breadth at the latitude of Chiloé, widens out proportionately as its valleys are submerged in the sea, and in the Magellan Archipelago it covers an area of at least 120 kilometres.

“As we have said, the summits of the Cordillera are scattered irregularly throughout this zone, a few, such as Mounts Fitz-Roy, Castle Hill, Stokes, Paine, etc., being on the east; others, such as Mounts San Valentín, Burney, the western summits of Tierra del Fuego, being found much nearer the outer or oceanic border of the mountain ridges; finally, numerous unknown snow peaks between them, Mounts Ladrillero, Bachelor, Sarmiento and Darwin, occupy a more central position in the orographical zone of the Andes.

“The general level of the chain of the Andes becomes gradually lower from the Bolivian plateau and the Atacama Sierra, where it rises to a height of 4000 metres (13,124 feet) to the Inlet of Reloncavi, the first entrance made by the sea among its crests, as the volcano Calbuco is situated to the west of said inlet. From this point the Cordillera is continued partly on the continent, partly on the islands: *it should be noted that the valleys of the rivers Palena, Aisen, Huemules and Blanco cross it from one side to the other, until it terminates north of the Last Hope Inlet, between 51° and 52° S. lat.; at this point all the continental mountain ridges are intersected by the marshy plains of Diana, which extend from Bahía del Desengaño (Disappointment Bay) as far as the western sources of the river Gallegos.* In this latitude, and to the south of this break, the numerous snow summits of the Andes are scattered throughout the many islands and peninsulas divided by the tortuous western channels of Patagonia.”

P. 132.—“The dominion of Chile over Eastern Patagonia\* begins at parallel 52° S. lat., at the point where this parallel is intersected by the *divortia aquarum* of the Andes. It is this point of separation which it is important to ascertain and to establish, and the discovery of it was one of the principal objects of our exploration; this, however, has served only to confirm a fact asserted for more than three centuries, and which seems to have been forgotten in the drawing up of our Boundary Treaty, namely, that the Cordillera de los

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\* There is no agreement of opinion amongst Chilian geographers respecting the division of Patagonia into Eastern and Western. Whilst Señor Bertrand only considers as Western Patagonia the part included to the west of the Andean Cordillera, and as Eastern, that to the east; Señores Barros Arana, Steffen and Fischer maintain that Western Patagonia begins in the Patagonian plain in the neighbourhood of the Cordillera, and to the east of the latter. Señor Bertrand is right; Western Patagonia is the Chilian region, situated on the west of the Andean summits, to the south of parallel 41, and all the Eastern region belongs to the Argentine Republic as far as parallel 52° S.

*Andes loses its continuity upon reaching the Patagonian region. Its summits are scattered throughout the numerous islands and peninsulas of the western channels: the divortia aquarum of the waters which flow into both oceans is frequently found to separate from the Cordillera's broken ridge and to remove further to the east, sometimes reaching even to the level region of the Pampas. This occurs more especially in the vicinity of parallel 52° S., where the plain extends from one ocean to the other."*

In Chapter VI. (page 133) have been quoted the results of the journey of the Chilian explorers Señores Rogers and Ibar both of which agreed that the region visited by them was situated to the east of the Andes, and Señor Bertrand confirms those results, by saying :—

P. 134.—“From our own observation, we may corroborate this fact, that the whole mountain-land on the continent in the region in question is broken; and assert that north of parallel 52° a perfectly level space of a minimum extent of 10 miles exists. This plain (plains or marshes of Diana) we saw from two different points, first from the summit of the Penitente ridge, from whence we also saw various inlets of Disappointment Bay; and afterwards from the Deslinde cliffs, the elevation of which, though insignificant, rises above the horizon of these plains, which at their great-st height certainly do not exceed 250 metres above sea-level. We did not at that time go further away than 30 miles from Disappointment Bay, the shores of which were, however, inaccessible to us by reason of the impassability of the marshes between us and them.

“It has therefore been conclusively demonstrated that in 52° S. lat. the Cordillera de los Andes sheds all the waters of its slopes into the Pacific, and that the continental divortia aquarum must be sought east of it in the extensive plains formed by the western tributary of the river Gallegos.\*

“The point, necessarily somewhat indefinite, owing to the plain and marsh of this region, at which the divortia aquarum crosses the parallel, is to be found at the northern foot of a wooded mountain crowned by volcanic rocks, and which terminates on the south in the Penitente ridge, and the approximate situation of this said intersection must be at the meridian of 72°, very near the coast of the channels, approaching, according to our investigations in Disappointment Bay, to within 10 miles of the meridian named.”

It should be stated that no act of the two contracting powers gave rise to the interpretation of the Treaty of 1881 suggested by Señor Bertrand. When that agreement was made, both countries were aware of the existence of rivers, tributaries of the Pacific, which received a portion of their waters from the eastern slope of the Cordillera, and even from the Patagonian plateau, but the boundary agreed upon was the Cordillera de los Andes, the true natural and traditional boundary, and not the *continental water-parting*.

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\* In this plain the Chilian Expert tries to place branches of the Cordillera, in order to avoid the strict fulfilment of Art. 2 of the Protocol of 1893, and Art. 3 of the Agreement of 1896.



The Chilian statesmen shared these views even after the differences of opinion which arose between the Experts had been submitted to Her Britannic Majesty's Government (pages 421 and following).

According to Señor Bertrand himself, the boundary was the summit of the Cordillera de los Andes, and the eastern slope of the Andes was Argentine to the north of 52° S. lat. as it was Chilian to the south of the said parallel. The *divortium aquarum* of the Andes mentioned in the Treaty of 1881 is not the continental divide, but the watershed which occurs at the summits dividing the two slopes, to which Señor Bertrand refers.

Señor Bertrand's remarks made in 1884 found an echo in the Chilian press. The Argentine press replied to the said remarks, and the agitation commenced concerning the delimitation of the boundary in these regions, *owing to the possibility of the Argentine Republic obtaining an outlet on the Pacific.*

When the Chilian Expert began his campaign against the natural boundary determined in the Treaty of 1881, it was thought advisable in Argentine official quarters to arrive at a compromise ratifying once more the orographical limit and ceding to Chile the Argentine ports in the waters of the Pacific. The aim of Señor Barros Arana's pretensions was to incorporate into his country, Argentine settlements "on the eastern foot or in the eastern valleys of the Cordilleras," as appears from the important confession made by Doctor Steffen later on; and, even before Señor Barros Arana's entrance into office, it was considered expedient in Argentine Cabinet Councils to negotiate—

"A compromise or a solution, leaving the Patagonian valleys to the Argentine Republic and the Pacific ports or landlocked bays to Chile, a possible outcome of a moderate policy, and which would satisfy joint aspirations."

That compromise was entered into in the Protocol of 1893, being embodied in its Article 2, where the summit of the main chain of the Andes is recognised as the boundary between the reciprocal sovereignty of the two countries, so as to render impossible any Chilian claim on "the eastern foot or in the eastern valleys of the Cordillera," and where, in its final part, it is provided—

"If in the peninsular part of the south, on nearing parallel 52° S., the Cordillera should be found penetrating into the channels of the Pacific there existing, the Experts shall undertake the study of the ground in order to fix a boundary line, leaving to Chile the coasts of said channels; in view of which study, both Governments shall determine said line amicably."

During the negotiation of this Protocol there arose no question, in any case, of the *continental divortium aquarum in that region*; on the contrary, the Argentine Government, having proposed that an extent to the line of coasts should be determined (one mile), the *Chilian Expert himself* declared that it would be more advantageous to fix as a line, the heights nearest to the line of the waters, i.e. a line analogous to that stipulated between Mount Dinero and Mount Aymond, in order to leave to Chile the coast of the Straits of Magellan—a line in respect of which the water-parting was not taken into account.

In the Agreement of April 17, 1896, likewise arranged between the Governments in order to solve fresh difficulties raised by the Chilian Expert, and in which it was decided to submit to Her Britannic Majesty's Government the differences between the Experts when fixing the dividing landmarks in the Cordillera de los Andes to the south of parallel  $26^{\circ} 52' 45''$  S., it was directed :—

Article 3.—“The Experts shall proceed to effect the examination of the ground in the region near parallel  $52^{\circ}$  S., dealt with in the latter part of Article 2 of the Protocol of 1893, and shall propose the boundary line which is to be adopted there, should the case arise which is foreseen in said stipulation. In the event of any difference as to the fixing of this line, it shall also be decided by the Arbitrator appointed in this Agreement.”

The Experts, in consequence, planned the work accordingly, and the Argentine Expert visited the ground in order to gain personal knowledge of its features, so that, when dealing with this point of the general frontier line in the Record of September 1, 1898, he said :—

“1. That, in accordance with paragraph 13 of his statement set forth in the Record of August 29 last, and the agreement arrived at in the meeting which took place on May 1 of last year, to carry out the provisions of the last part of Article 2 of the Protocol of May 1, 1893, and of Clause 3 of the Agreement of April 17, 1896, the fifth Argentine Sub-Commission of demarcation had effected the surveys ordered by the Experts on April 28, 1897, to investigate if the case foreseen in said Protocol and Agreement had arisen, and with them to enable the Experts to comply with what is provided in said covenants.

“2. That in view of said surveys and the observations he has personally made on the ground, he declares he has the firm conviction that, in fact, the Cordillera de los Andes is found penetrating into the channels which really exist in the peninsular part of the south on nearing parallel  $52^{\circ}$ , and that the waters of those channels wash coasts of lands which do not belong to the Cordillera de los Andes, which lies to the west of said channels.

“3. That the geographical fact of the existence of plains to the east of the salt-water



channels situated to the east of the Cordillera de los Andes, had been verified in 1557 by Pilot Ladrillero; in 1830 by the British hydrographers Skyring and Kirke during the expedition of the 'Beagle'; in 1877 by the Lieutenant of the Chilian Navy, J. T. Rogers, and the Chilian naturalist, Enrique Ibar; and in 1884 by the Chilian civil engineer, Alejandro Bertrand, who says it is shown in an irrefutable manner that in 52° S. lat. the Cordillera de los Andes sheds all the water from its slopes into the Pacific.

"4. That he requires to know the opinion of the Chilian Expert on this point, so that, if both agree on same, they may proceed to fulfil what is ordered in said Protocol and Agreement."

To which the Chilian Expert replied :—

"That, as regards the statement made by his colleague with reference to the Cordillera de los Andes penetrating into the channels of the Pacific in the vicinity of parallel 52°, he agrees with his appreciations in so far as they may apply to several elevated mountain regions of the Cordillera de los Andes; but not to the totality of same, because other branches of same extend over the continent towards the north of the estuary of Última Esperanza.

"He adds that he does not give to the expressed proposition the character of prior importance, because the survey of the ground made by the Chilian Commission to fix a divisional line leaving to Chile the *coasts of said channels*, leads him to the conclusion that the natural interior delimitation of said coasts is no other than the one of the hydrographic basin which empties into them; that this limit is at the same time the one which agrees best with the spirit of the Treaty of 1881, and that in consequence, he has included it in this form in the proposal of the general line presented to his colleague, in order that should he not accept same, it may be considered by the Governments as the result of the surveys made by him, which are to serve as a basis for the resolution of the Arbitrator who is to decide on the divisional line in that region, according to what is stipulated in the last part of the third clause of the Agreement of 1896."

In this statement the Chilian Expert had made an omission and an error. The Treaty of 1881 orders that the boundary should be prolonged over parallel 52° S. lat. from the meridian 70° west of Greenwich as far as the *divortium aquarum* of the Andes, and the Protocol of 1893 enacts that, *if channels should there penetrate from the Pacific, to the east of the Cordillera*, so that the line prolonged as far as the *divortium aquarum* of the Andes *should cut the said channels*, the Experts should propose to their respective Governments *a dividing line which would leave to Chile the coasts of those channels*. The only answer which the Chilian Expert gave to the affirmative opinion of the Argentine Expert respecting the penetration of said channels to the east of the Cordillera de los Andes, was that *towards the north of the Last Hope Inlet are situated some branches of the said Cordillera*.

The northern coast of Last Hope Inlet lies in about  $51^{\circ} 25'$  S. lat., between which degree and  $52^{\circ}$  S. there remain  $35'$  which the Chilian Expert appears to have forgotten. The fact is that he could not have affirmed that in this section *there exists the smallest hill which has any connection with the Andean Cordillera*, for his own technical adviser, Señor Bertrand, had stated in his Official Report that the continental divide is produced in the impassable marshes of the plain, which the 'Beagle's' explorers called "*Llanuras de Diana*," to the east of the bay, which the said explorers named "Disappointment Bay"; and Map XI. proves the correctness of this assertion.

The Chilian Expert has declared in the Record of August 29, 1898, that the frontier line which he proposes between parallels  $26^{\circ} 52' 45''$  and  $52^{\circ}$  "runs along all the highest crests of the Andes which divide the waters and constantly separates the springs of the rivers which belong to either country," a line which "is no other than the natural and effective dividing line of the waters of the South American Continent."

It is known that his refusal to state in the Records that the said line is situated in the "Cordillera de los Andes," arises from the fact of his pretending that the boundary agreed to in the Treaties refers not to the Cordillera as described by him in the 1874 edition of his book upon Physical Geography, but to what he calls the system of the Andes, and that the main chain of the Andes referred to in the Protocol of 1893 is formed by the "uninterrupted line of crests which divide the waters" within that so-called system, which comprises according to him the continental *divortium aquarum*. Nevertheless, in the reply which he gave to the Argentine Expert, in the Record of September 1, when dealing with the fulfilment of the provisions of Article 2 of the Protocol of 1893, and of Article 3 of the Agreement of 1896, he was unable to avoid taking into account the Andean Cordillera as the basis for determining the boundary, and that explains his declaration as to branches of the Cordillera being situated towards the north of Last Hope Inlet. But, while saying this, he has not only committed an error, but he has also forgotten the Treaties once more. Belonging to the said Cordillera, there are no "branches extending over the continent towards the north of the estuary of Última Esperanza (Last Hope Inlet)," the isolated hills that exist there being merely remains of the Pre-Cordillera, lying between the Cordillera de los Andes and the Patagonian tableland; but it is well to say that the boundary line he proposed in that region is all situated even to the east of those hills. With regard to the main chain of the Cordillera, it suffices to say



for the present that it rises to the west of the inlet and of Disappointment Bay, and that *it is not visible from their eastern coasts.*

The Chilian Expert, when asked for his opinion as to the channels of the Pacific penetrating to the east of the Cordillera, did not give a definite reply to the Argentine Expert, nor did he propose any line which would leave to Chile the coasts of said channels, as he had been ordered to do. He included such section in his general line of frontier, reproducing in the Record of September 1, the corresponding part as it has been mentioned in detail in the Record of August 29, 1898.

It is necessary, therefore, to analyse that portion of the general line in order to determine the true Chilian territory in that region, according to the Agreements, and to describe, although in general terms, the zone between Mount Stokes and parallel 52°, in order to show the inapplicability of the Chilian line, *planned against all the stipulations of the Treaties.*

## 2. GENERAL CONFIGURATION OF THE GROUND.

It has already been stated that the Argentine and Chilian lines which coincide in the Cordillera de los Andes between Mounts Fitz-Roy and Stokes, afterwards deviate from one another, the first continuing to the south along the summit of the Cordillera and the second diverging to the east in search of the continental divide. The above-mentioned section of the Andes, which is *practically impassable*, is bounded along its whole extent by the general longitudinal eastern depression. Mount Fitz-Roy, 3370 metres (11,057 feet), advances to the east with Mount Torre, 2960 metres (9711 feet), and another peak of 2740 metres (8990 feet) commanding the north-west angle of Lake Viedma, and to the west extends an unexplored mass of snowy mountains and glaciers which descend to Eyre Sound, on the Pacific Coast. This mass forms the Cordillera de los Andes, and there, in its culminating edge, are located No. 304 of the Argentine line and No. 321 of the Chilian line, both of which are accepted as points of the international frontier by the Record of the Experts, signed at Santiago on October 1, 1898. To the south of Mount Fitz-Roy the high mountains continue, and the ice-fields reach the level of the Lake. Peaks of 3170 metres (10,400 feet), 3000 metres (9843 feet), 2970 metres (9744 feet), Mount Huemul, 2670 metres (8760 feet), and 2640 metres (8662 feet) rise near a

vast glacier, a part of which has been represented advancing into the lake. These mountains correspond to No. 305 of the Argentine line. Mount Campana on the south is 2570 metres (8432 feet) high, and Mount Norte—the culminating peak of the Pre-Cordillera—reaches 2950 metres (9679 feet), and separates the basin of Lake Viedma from that of Lake Argentino. The depression referred to on several occasions as existing between the Cordillera and the Pre-Cordillera is visible between Mounts Campana and Norte. To the south of this is supposed to exist a lake fed by glaciers and emptying itself into the northern



MOUNT NORTE (2950 m.; 9679 f.) SOUTH-WEST OF LAKE VIEDMA.

arm of Lake Argentino. Mount Agassiz, 3170 metres (10,400 feet), rises to the west of this arm, sending its glaciers to the lake, as does also Mount Heim, 2450 metres (8038 feet). The sharp peak of Mount Mayo, 2380 metres (7809 feet), is situated at the same eastern slope of the Cordillera, to the west of Lake Argentino, and to the south of it high snowy mountains continue, attaining 2260 metres (7415 feet), 2340 metres (7677 feet), 2700 metres (8858 feet), the glaciers of which reach the lake. At its southern arm empties Lake Frío, fed by a large and most interesting glacier (Plate CXXXII.), which sends its

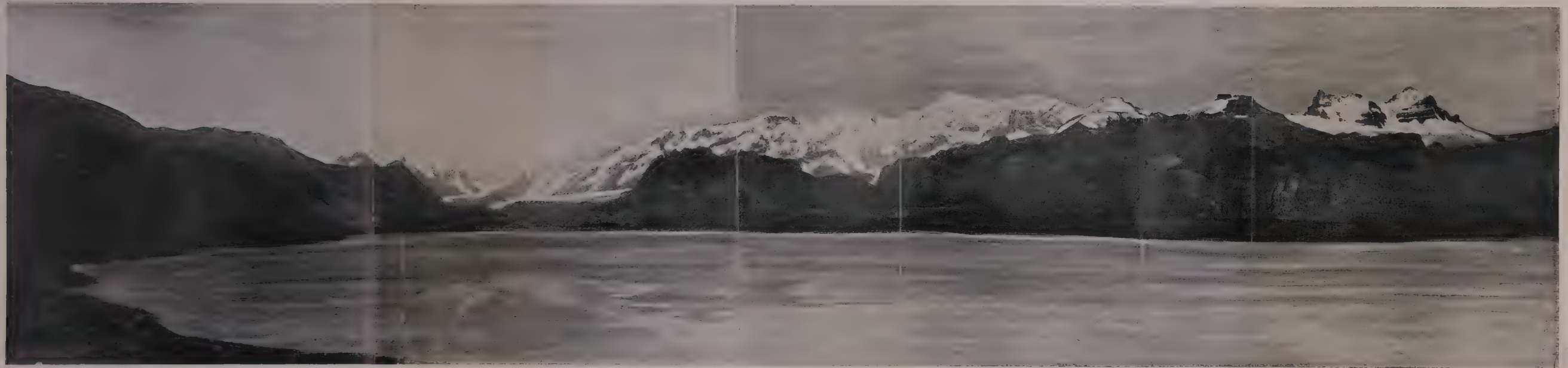


*Mount Stokes.*

*Branch of the Glacier to the South.*

*Branch of the Glacier to the East.*

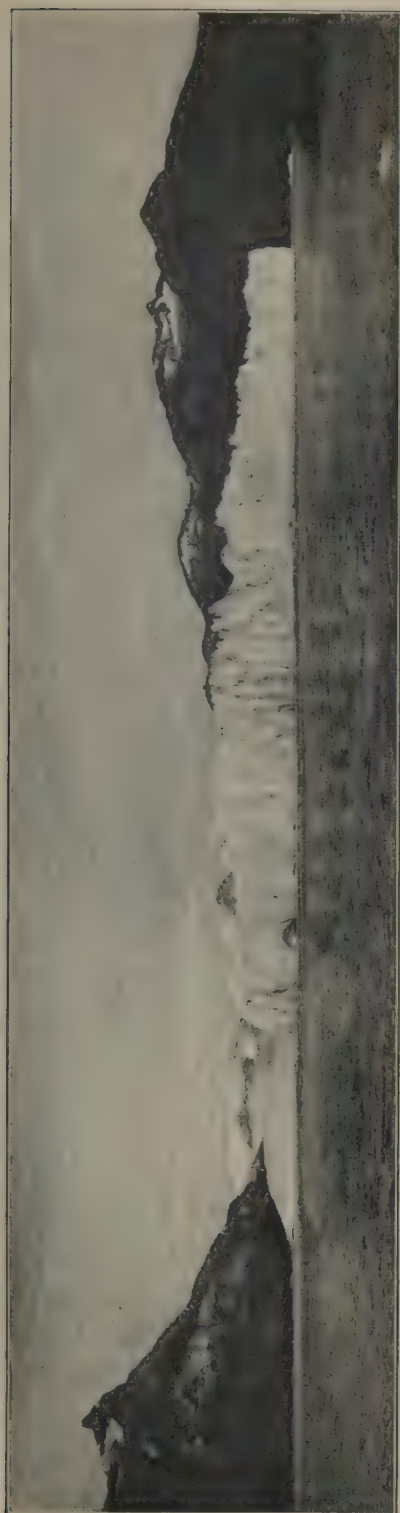
*Eastern Ridge of the Cordillera de los Andes.*



SOUTH-WESTERN PART OF LAKE ARGENTINO, SHOWING THE EASTERN RIDGE OF THE CORDILLERA AND THE GLACIER, THE BRANCHES OF WHICH ARE TRIBUTARIES TO THE ATLANTIC AND TO THE PACIFIC.







THE FRONT OF THE GLACIER IN THE WESTERN ARM OF LAKE ARGENTINO.

waters to the Atlantic Ocean by Lake Argentino and river Santa Cruz, and to the Pacific Ocean, by Lake Dickson, river Paine, Lake Maravilla, river Toro and Last Hope Inlet, while the glacier lies at the eastern slope of the Andes.

It would be difficult to determine accurately the continental divide under the enormous mass of broken ice which surrounds Mount Stokes, but it is certain that the line of the divide does not run across Mount Stokes, as all the waters from this mountain now flow to the Pacific (though along the foot-hills of the eastern slope of the Cordillera), till they reach the water-gap of Kirke south of  $52^{\circ}$  S. lat. These waters are principally produced by the glacier which descends from the northern and eastern slope of Mount Stokes to Lake Dickson, and which is only a branch of the very extensive one, that in that latitude, occupies the western and the eastern side of the Cordillera, its foot reaching the sea level at Peel Inlet on the western coast. There are no high peaks in that part of the summit of the Cordillera, but an ice-field occupies the broad gap, and, descending to the east, meets another glacier, coming from the north from the high mountains which cause it to deviate to the south of Lake Dickson. To the east of this northern glacier there are two others which, after uniting with the latter, descend to Lake Frío (Plate CXXXIII.), and to the south of Mount Stokes there is another which joins the one coming down from the broad western gap

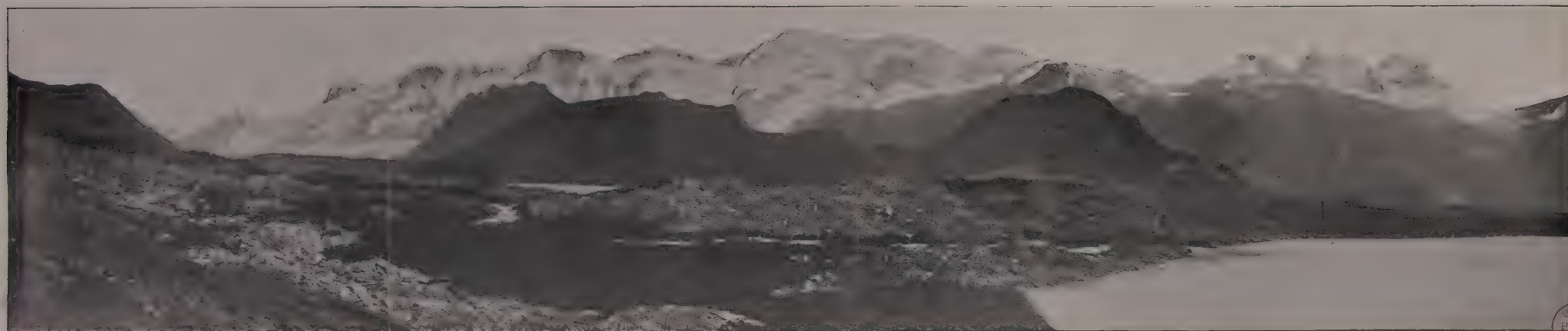
at Lake Dickson. The glacier of the western arm of Lake Argentino descends from the eastern slope of the Andes, and sometimes advances from one of the shores to the other, thus dividing that part of the lake. In Plate CXXXII. are seen, the branch of the glacier coming from the northern mountains, and that coming from the west, which afterwards turns to the south round the base of Mount Stokes, and penetrates into Lake Dickson. Plate CXXXIII. shows the northern part of the glacier, Lake Frío and the morainic dam which separates it from Lake Argentino.

The Chilian Expert has said that his landmark No. 332 corresponds to the "Cordillera of Stokes, which separates the hydrographic basin of Lake Argentino, which empties into the Atlantic through the river Santa Cruz from the slope down which flow the Chilian rivers which empty into the channels of Patagonia in the Pacific." This paragraph of the Record of August 29, 1898, is somewhat confusing. Which is the Cordillera of Stokes, and which are the Chilian rivers which empty into the channels of Patagonia in the Pacific? It would appear that this "Cordillera of Stokes" is a stretch of the Cordillera de los Andes in the latitude of Mount Stokes; that the rivers referred to, flow down from the western slope of this Cordillera, and that the Chilian line agrees with the Argentine line, which runs along the summit of the Cordillera de los Andes from which the glaciers that feed the rivers descend; but if the maps published by the Chilian Boundary Commission as well as the one presented to Her Britannic Majesty's Government are examined, it will be seen that this supposition is erroneous in some respects, as the Chilian line from No. 332 to the north of Mount Stokes runs along the summit of that mountain, continues to the south, and then turns sharply to the east in a long stretch where are located "Nos. 333 to 335, named 'Cordillera,' 'Pass of Los Baguales,' and 'Cordillera of Baguales,' which separate the hydrographic basin of the slopes, down which flow the waters of lakes Toro and Sarmiento and river Los Baguales, which empty into the Pacific, from the slopes down which flow the waters that go to Lake Argentino and river Santa Cruz," as is stated in the Record quoted. Mount Stokes is not in the main chain of the Cordillera, but to the east of it, and between its summit and the pass of Los Baguales there is no Cordillera at all, but the southern continuation of the eastern longitudinal depression now occupied by the glacier which bounds the northern shore of Lake Dickson, the so-called Cordillera de los Baguales being formed by the eastern part of the Pre-Cordillera, and by the lava beds that there cover the western part of the Patagonian tableland. The river Los



*Gap to Peel Inlet.*

*Glacier.*



*Moraine.*

*Lake Frio.*

*Moraine.*

*Lake Argentino.*

EASTERN SLOPE OF THE ANDES AT LAKE ARGENTINO.





Baguales does not empty itself in the Pacific Ocean, but its waters flow to Last Hope Inlet, which is situated to the east of the eastern slope of the eastern ridge of the Cordillera, and cannot be considered as oceanic water, although the waters are brackish.

The level of the surface of Lake Argentino is 200 metres (656 feet), of Lake Frío 250 metres (820 feet), of Lake Dickson 270 metres (886 feet) above the sea, and the last two occupy the end of the same tectonic depression as the south-western arm of Lake Argentino, which has been intersected by glaciers and moraines. The glacier between the two has an altitude of 560 metres (1837 feet) above the sea, and about 300 metres (984 feet) above the level of the lakes. To the east of the depression, the hills of the Pre-Cordillera rise gently with altitudes of 1300 metres (4265 feet), 1400 metres (4593 feet), and 1500 metres (4921 feet), and to the east of them runs, in a southward direction, the river Zamora, fed by the waters of these hills, and those of Mount Cagual, situated to the east.

Mount Cagual, 1500 metres (4921 feet), joins on the north-east the high tableland, the south-western extremity of which bears the name of Sierra de los Baguales (Baguales ridge). A gap of 1300 metres (4265 feet) in height separates the river Castillo, a tributary of Lake Argentino, from the river de los Baguales, fed by the waters of the high tableland of that name and of the eastern slope of Mount Cagual.

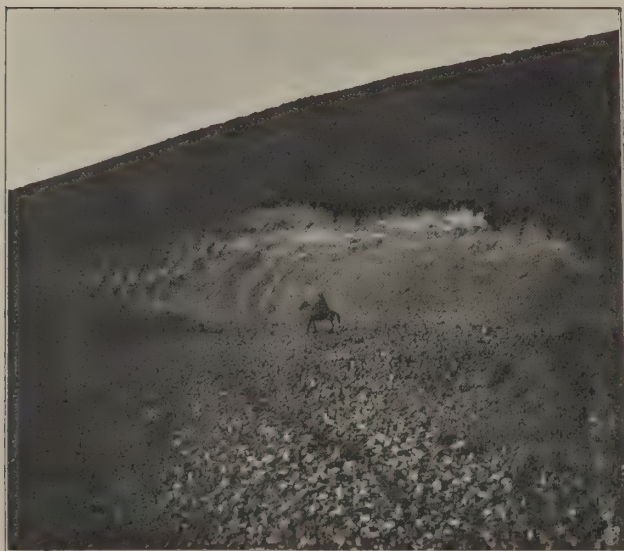
The tableland bears in the Chilian list the pretentious name of "Cordillera de los Baguales," though its summit does not attain 1800 metres (4906 feet). This high tableland gradually descends towards the east, and takes the name of Meseta Vizcachas (tableland of Vizcachas), until it is lost in the general tableland stretching out towards the Atlantic. There is no question here of a branch of the Cordillera de los Andes: the said tableland is the result of geological phenomena independent of the Cordillera; it is a part of the Patagonian tableland, uplifted to the west, and modified by local volcanic eruptions and by the pressure exercised by the tertiary granites and diorites of the west, which have uplifted the cretaceous beds of the base.

Dr. Otto Nordenskjöld, who visited the extremity of the continent in 1896, succeeded in approaching this high tableland, but he did not visit its north-western region, and he is mistaken in saying that the soft tertiary rocks of the Baguales mountains have been protected by an immense sheet of basalt, and that consequently there is a peninsula jutting out from the Cordillera thirty miles into

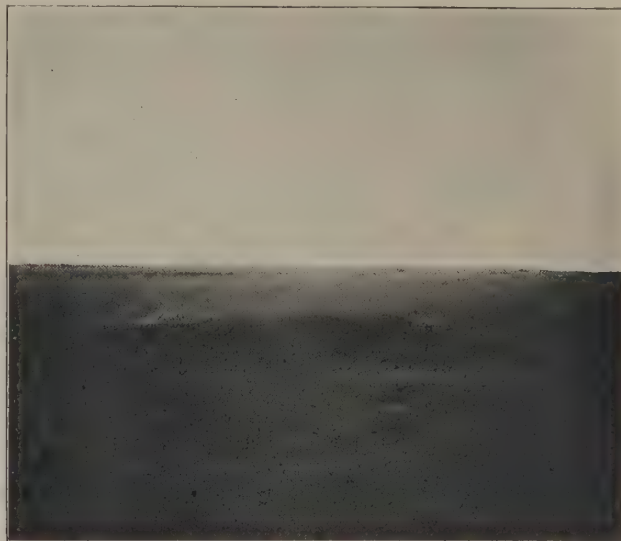
the lowlands, between the Cordillera and the river Baguales west of the general longitudinal depression.

The eastern part of the high tableland, called Meseta de las Vizcachas, attains between 1000 and 1300 metres (3281 and 4265 feet), and is covered with basaltic lavas cut by deep ravines. The small hillocks projecting from the tableland are only inclined lava beds or mesas left by erosion.

In one of these hillocks the Chilian Expert places his landmark No. 336, naming it Sepulero summit, and from that point his line, which has run from west to east, changes its direction, and bends sharply to the south, between the rivulets that flow into the river Coile and those into the river Vizcachas, the sources of which are in the tableland, *thus descending to another transversal depression of the tableland which extends to*



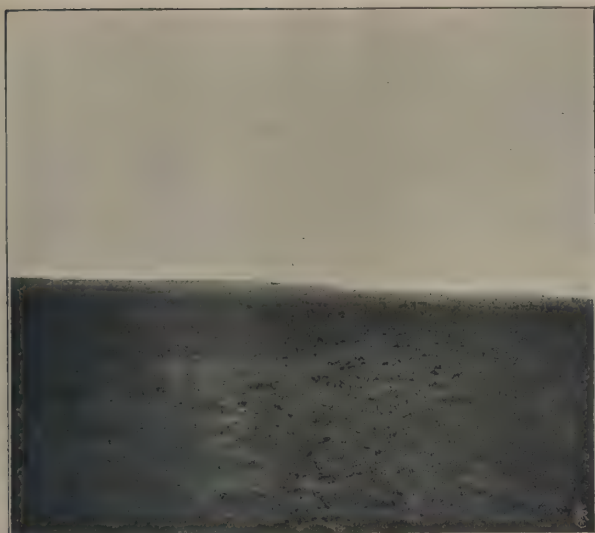
THE GLACIAL DRIFT IN THE DEPRESSION OF THE RIVER COILE TO THE EAST OF VIZCACHAS.



REGION OF THE CONTINENTAL DIVIDE TO THE SOUTH-EAST OF THE RIVER VIZCACHAS.

*the Atlantic.* The accompanying figures include the places called in the Chilian list "unnamed pass" (337), "unnamed pass" (338), "nameless hillock" (339), "nameless hillock" (340), "nameless hillock" (341), and "unnamed point in the Pampa" (342), and it is for the Tribunal to appreciate whether the summit of the Cordillera de los Andes, or any branch of that Cordillera, is there to be found. In reality this is only an old depression by which the waters of the Atlantic reached the





REGION OF THE CONTINENTAL DIVIDE IN  
THE TRANSVERSAL DEPRESSION OF THE  
RIVER COILE.

with small lagoons, sometimes overgrown with rich grass. Through this tract of land a broad river runs, formed by the convergence of three streams descending from the Baguales mountains. Most interesting is the easterly one, the river Vizcachas. It flows first east, then south, and after approaching the sources of the Coyle river within a distance of only a few miles, it bends west at a distance of 30 miles from Lake Maravilla. Its whole course is through level country, the soil consisting of slightly stratified sandy clay, in which pebbles are embedded."

It is in this level country that the Chilian Expert considers that the "*main chain of the Andes*" is situated. The Argentine Expert, who has surveyed those places in carrying out his mission, confirms these observations of Dr. Nordenskjöld, who, continuing his description of this region, adds :—

fjords of the Cordillera, afterwards occupied by lakes, which were covered by the general ice sheet, and then by glaciers. Dr. Nordenskjöld,\* who has visited this spot, says:—

P. 405.—"South from Lake Sarmiento and the first-mentioned mountain occurs another lake, called in Spanish, Lago Maravilla (the marvellous lake), the largest in that great lake system. The exact area could not be ascertained, as I have only explored the eastern part, but it will probably be about 70 square miles. It is surrounded by mountains except in the eastern corner, where an extensive lowland begins, sometimes swampy or covered



THE RIVER VIZCACHAS.

\* The Geographical Journal, vol. x., 1897.



BEND OF THE RIVER VIZCACHAS AT  
THE CONTINENTAL DIVIDE.

*table-mountains, with steep slopes to the west, but a very gradual descent towards the Atlantic. The rivers and their valleys are Patagonian in their character, sometimes running through real canyons with perpendicular walls more than 200 feet high. Moreover, not very far to the east the Patagonian pampa proper begins, its gravel-covered surface stretching for hundreds of miles.*

Along the edge of the so-called "Latorre Mountains," which the geographers of Chile and her Expert call "Latorre Cordillera," though it is only the head of the tertiary Patagonian tableland, as the explorers of the 'Beagle' have stated (see page 108 and following), the latter carries on his line (No. 343), which then jumps to "Mount Barranco" (No. 344) or Dorotea, and thence through two "*unnamed passes*" (Nos. 345 and

P. 406.—"There exists, without doubt, a marked difference between the natural features to the east and west of the Vizcachas river, but at the same time there is a transition from one to another. Some low hills east of the river may be considered deposits left still after the erosion of the Baguales and *other mountains of the intermediate zone*, but they are surrounded *by land similar in natural features* to the Patagonian type, and that, as we proceed eastwards, soon becomes paramount. There are still *sharply defined heights formed of horizontal tertiary sandstones and conglomerates*; the highest point of the so-called Latorre Mountains ('Punta Alta') is about 3000 feet, but they are *all*



MORAINES AT THE CONTINENTAL DIVIDE TO  
THE EAST OF THE RIVER VIZCACHAS.

346) and an "unnamed hillock" (No. 347), reaches point No. 348, "which is the intersection of parallel 52°," adding the Record of August the 29th, 1898, that Numbers 326 to 342

"Separate the hydrographic basin of the rivers Vizcacha, Guillermo, Tres Pasos, tributaries of the lagoon Toro, that empties into the Bay of Última Esperanza, from the hydrographic basin of the river Coyle, that flows into the Atlantic."

As to Nos. 343 to 348 he says they—

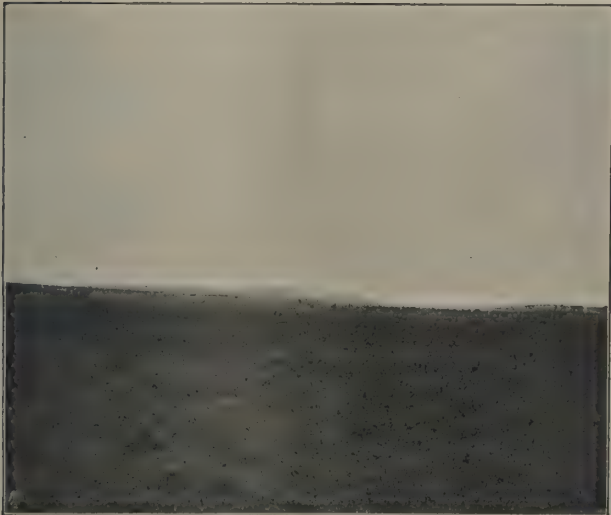
"Separate the hydrographic basins of the Chilian rivers Guillermo and Tres Pasos, tributaries of the lagoon Toro, and slopes down which flow the waters that go into Lake Balmaceda, which empties into the bay Desengaño, from the hydrographic basin of the rivers Turbio and Rubio, affluents of the river Gallegos, that flows into the Atlantic."

Señor Bertrand, who is charged to supply the Tribunal with the required information, and who is personally acquainted with this region,

may be able to say if those Chilian landmarks are within the Cordillera de los Andes, from which the boundary cannot swerve, and if they answer to the conditions stipulated for the limit between the Argentine Republic and Chile. As to the Argentine Expert, he maintains that the Cordillera de los Andes is not situated where the Chilian Expert has proposed to locate his landmarks to the



BASALTIC CLIFF IN VIZCACHAS  
TABLELAND.



REGION OF THE CONTINENTAL DIVIDE TO  
THE EAST OF THE RIVER VIZCACHAS.



east and south of the Cordillera "of Stokes"; it is therefore necessary to show where that unmistakable range rises.

The high Alpine character of the mountains between the river Las Heras and Calen Inlet at about  $48^{\circ}$  S. lat., as well as of those to the south of Mount Stokes, is similar to that of the mountains around Mount Saint Elías in northern Alaska, inasmuch as the greater number of the glaciers descend to the level of the sea, or to that of the eastern lakes, which are at a very low altitude.

This enormous rock and ice barrier stretches as a continuous mass as far as  $52^{\circ} 5'$  S. lat., where a breach called Kirke Narrow allows the waters of the western channel to penetrate to the east of the range and afterwards spread out in the swampy marshes of the eastern plains. Any attempt to



WATERFALL OF THE RIVER PAINE.

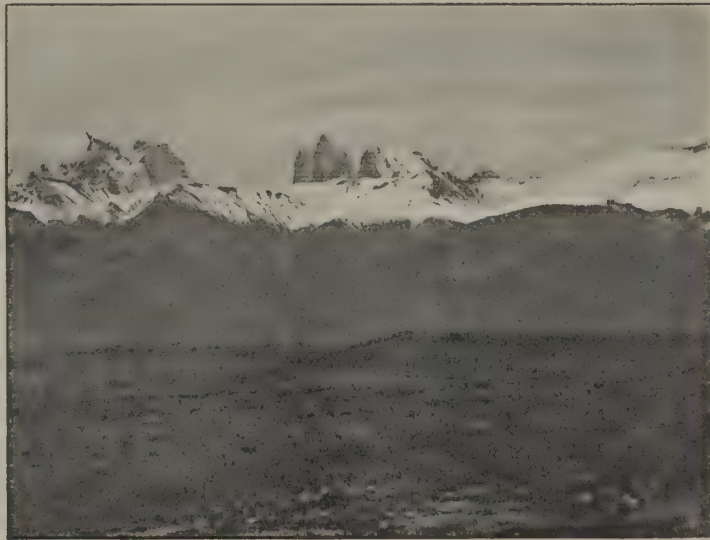
cross the range in this region has been without success, and there cannot exist a better frontier than that which it provides. The general height of the edge in the main chain is about 2500 to 3000 metres (8202 to 9843 feet); ice-fields cover its slopes and valleys, and icebergs float in Lakes Hauthal and Tyndall, and in the inlets of the western coast.

Between this true Cordillera and the imaginary one of the Chilian Expert there is an extensive zone, which must be considered, owing to its features, as an intermediary region between the Andes and the Patagonian plains—subdivided into Pre-Cordillera and eastern intermediary zone—and which the Chilian Expert considers as belonging to his own country without any reason at all.

It has been said that Lake Dickson receives the same glacier that feeds the southern arm of Lake Argentino, thus forming the continental divide to the east of the Andes, and that to the east of the Andes through hills, valleys and the tableland the Chilian line has been traced. Lake Dickson, 270 metres (886 feet),

empties itself by the river Paine, flowing to the E.N.E., which forms Lake Nordenskjöld, 200 metres (656 feet), and afterwards bends sharply to the south, leaving to the west Mount Paine, a granite mass of the Pre-Cordillera, which reaches 2800 metres (9187 feet), and is united to the Cordillera by extensive glaciers which descend to Lake Hauthal. Some small hills rise to the east of river Paine, between it and river Zamora, which flows to the S.S.E. and empties into Lake Maravilla, while the river Paine flows by rapids and waterfalls into Lake Paine. To the south-east of its outlet, and to the west of the river Zamora lies Lake Sarmiento, surrounded to the east by a morainic amphitheatre; its subterranean outlet must run to Lake Paine.

Lake Paine extends in an east-and-west direction at the southern foot of the mountain of that name, and empties itself into Lake Maravilla; to the west, Lake Hauthal reaches the first ridges of the Cordillera, the glaciers of which feed it. Plate CXXXIV. represents the lake, the first hills of the eastern ridge of the Cordillera, and a glacier descending from them. At the southern end of the lake there flows into it the outlet of Lake Tyndall, which is situated



MOUNT PAINE, FROM THE EAST.

between the Cordillera and Mount Donoso in the Pre-Cordillera. Further on ice-fields separate Mounts Geikie in the Cordillera from Mount Balmaceda in the Pre-Cordillera. The Cordillera continues southwards in the Peninsula Sarmiento, where the Cordillera Sarmiento constitutes the main chain of the Andes, and the Pre-Cordillera is represented to the south of Last Hope Inlet by the mountain called Moore Monument.

Lake Sarmiento, as well as the plain to the west and east, is a remnant of one of the ancient Andean fjords, formerly occupied by an extensive glacier which has deeply carved the cretaceous rocks in characteristic transversal undu-



lations. Dr. Nordenskjöld, who visited its eastern shore, states in the account of his journey, "*We have there a typical fjord of the age when the Atlantic extended almost to the eastern slope of the Cordillera,*" thus confirming the views of the Argentine Expert, who considers *the Cordillera as situated to the west of the lakes*, while the Chilian Expert pretends to find it *far to the east*.

To the south of Lake Sarmiento, between it and Lake Maravilla, rises the cretaceous Toro Hill, 1160 metres (3806 feet), one of the numerous isolated hills of the broken Pre-Cordillera, to which Dr. Nordenskjöld refers in the following terms :—

P. 405.—"On the south side of Lake Sarmiento there rises, to a height of more than 3500 feet (1160 metres, according to the Argentine surveyor), a mountain that can be considered typical of a large number of *others in the zone of transition between the Cordillera and the pampas.*"

Lake Maravilla stretches from west to east, forming a crescent, and its extremities are bounded by plains covered by moraines; to the east "an extensive lowland begins, sometimes swampy or covered with small lagoons, sometimes overgrown with rich grass," as ascertained by Dr. Nordenskjöld. To the west, another plain—ploughed by the ice forming undulations from west to east—separates Lake Sarmiento from river Blanco, which flows from the north-west, bringing the waters of Lake Hauthal to the plain of Lake Maravilla. According to the traces observed of the old moraines, the ice accumulated in the folds of Mount Paine reached an altitude of 1200 metres (3937 feet) above the sea, i.e. 1000 metres (3281 feet) above the present plain, while on the tableland of Vizechas and Sierra Chica are erratic boulders as high as 700 metres (2297 feet) above the sea. On the south, Lake Maravilla is bounded by a group of hills, likewise isolated, surrounded in the west by river Toro or Serrano, which, flowing out from the lake, empties into Last Hope Inlet; and to the east by a depression filled with fluvio-glacial remains which formerly united Lake Maravilla with Last Hope Inlet, and where runs river de la Cueva, which drains the waters of the little lake of that name.

The maps published by the Chilian Boundary Commission, as well as that presented to the Arbitrator by the Chilian Representative, show the existence of a river which conveys to Last Hope Inlet all the waters *of the eastern slope of the Cordillera, and also those of the intermediary depression between the Cordillera and the Patagonian tableland.* This river does not exist in the place where it is indicated. The river Toro or Serrano drains all the waters of the north-west creek of



*Eastern Ridge of the Cordillera.*

*Glacier.*

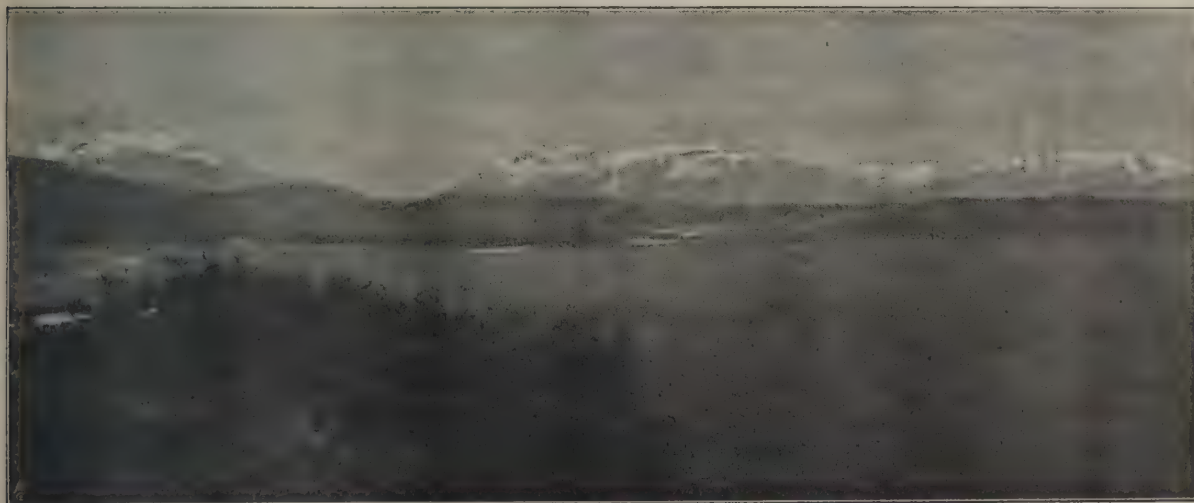


LAKE HAUTHAL AND THE EASTERN RIDGE OF THE CORDILLERA DE LOS ANDES.



the inlet, at the *eastern* (not at the western) foot of Mount Balmaceda—a mountain, which, *although to the east of the Cordillera, and pertaining to the Pre-Cordillera, the Argentine Expert has left in Chilean territory, in fulfilment of the stipulation according to which the coasts of that inlet must be Chilean.* The Argentine line, which runs from the north along the summit of the Andes, turns to the east in about  $51^{\circ} 20'$  S. lat., along the valley of river Geikie, and continues in this direction till it reaches the confluence with river Serrano.

Plate CXXXV. contains a panoramic view taken from a little hillock near river Zamora, to the north-east of Lake Maravilla, and shows that river, Lake Sarmiento, the south-western plains, and, to the west, the region towards Lake

*Mt. Balmaceda.**Mt. Donoso.**Eastern Ridge of the Cordillera.*

VIEW FROM THE PLAINS TO THE WEST OF LAKE MARAVILLA.

Tyndall, clearly indicating that, while the Cordillera stretches to the west, there are only isolated hills and the extensive plain to the east. The figure inserted herewith shows Lake Maravilla, and, far to the west, the Cordillera. To the north and south are only low hills, and to the east the morainic deposits shaped like an amphitheatre, dividing Lake Sarmiento into two parts, which are merely the remains of a more extensive lake existing there before the glacial era. Plate CXXXVII. Fig. 1 represents this depression, and its continuation in Consuelo Cove, showing Mount Chacabuco, to the north of Last Hope Inlet, which is also visible. The two figures of Plate CXXXVI. represent the Pre-Cordillera and the Cordillera, and in both, to the east of the foreground, there is shown the valley of



the river Zamora. These photographs have been taken from Contreras ridge, which lies to the east of the river, belongs to the Pre-Cordillera, and is watered on its eastern foot by the river Baguales, coming from the high plateau of that name, which in that latitude forms the western boundary of the low plains of the transversal depression from Lakes Sarmiento and Maravilla, to the river Coile. The lava walls forming the southern edge of the Vizcachas tableland command it to the north. This tableland, having been worn by erosion to the east, where the northern affluents of the river Coile rise, inclines to the south from 1100 metres (3609 feet) to 760 metres (2493 feet), 700 metres (2297 feet) and 580 metres (1903 feet), to the east of the dry lake-bed, which is at present the

*Moore's Monument.**Mt. Balmaceda.**Mt. Chacabuco.*

NORTH-EAST COAST OF LAST HOPE INLET.

pasture-land of Aiken. The south edge of the hills, detached by erosion of the Baguales tableland, does not exceed 1600 metres (5249 feet) in altitude, while the Vizcachas tableland there attains 1300 metres (4265 feet). At the foot of these walls, 500 metres (1640 feet high), rise to the south the river Vizcachas, and to the south-east some of the tributaries of the river Coile, falling gently to the valley; to the south and south-east are the northern rivulets of the river Vizcachas cutting their way through the Vizcachas hill, which is merely a worn remnant of lava bed at the foot of the tableland at an altitude of 550 metres (1804 feet) above the sea. As it flows to the south this river receives another stream from the west, then bends to the south-east and turns at a sharp angle to the west,

*Cazador Hill*  
(930 m.; 3051 f.).

*Ballena Hill*  
(870 m.; 2854 f.).

*Toro Hill*  
(1160 m.; 3806 f.).

*Lake Sarmiento.*

*Mount Donoso.*

*Mount Paine*  
(2840 m.; 9318 f.).

FIG. 1.



PANORAMIC VIEW FROM RIVER ZAMORA AT 51° SOUTH LATITUDE.

*Ballena Hill.*

*The Eastern Ridge of the Cordillera.*

*Toro Hill.*

*The Eastern Ridge of the Cordillera.*

FIG. 2.



*Moraines.*

LAKE MARAVILLA FROM THE EAST.

*Moraines.*

*Lake Sarmiento.*

[Face p. 973.]

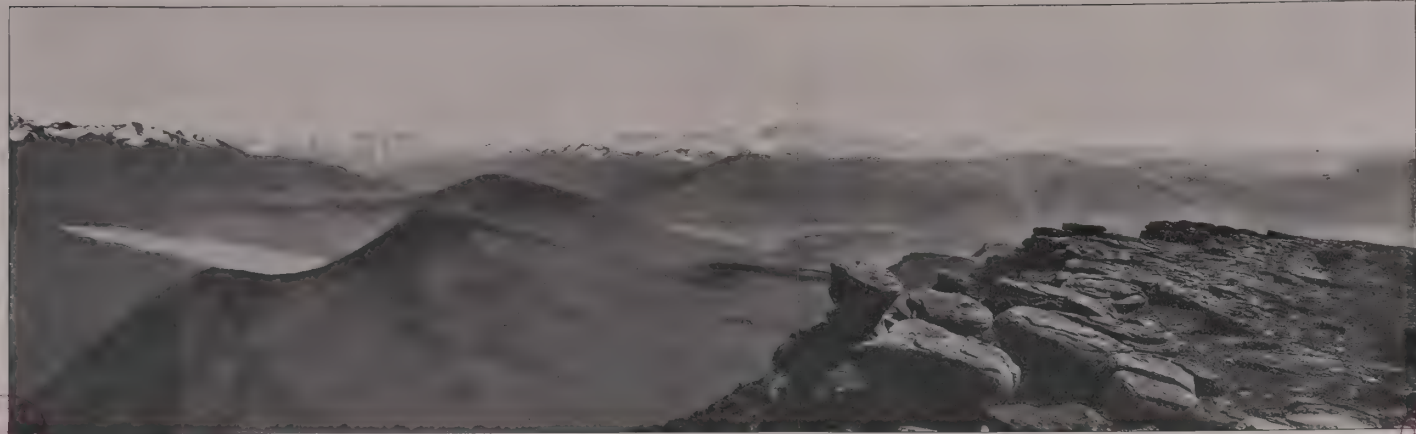




*The Cordillera to the West of Lake Dickson.*

*Mount Stokes*  
(2160 m.; 7087 f.).

FIG. 1.

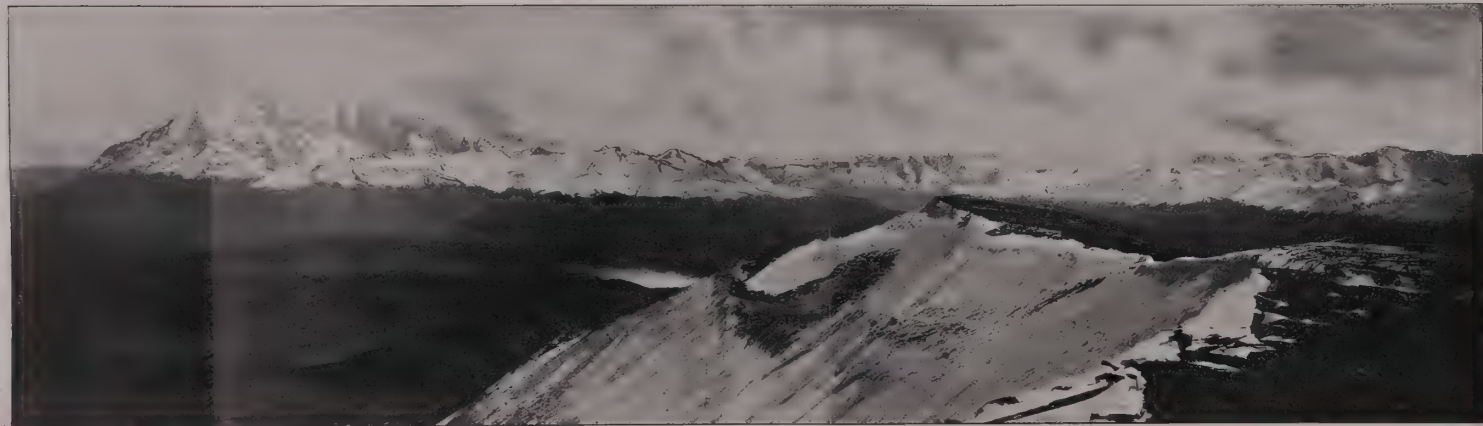


*Lake Nordenskjöld.*

THE EASTERN RIDGES OF THE CORDILLERA, FROM THE SUMMIT OF CONTRERAS RIDGE.

*Mount Paine.*

FIG. 2.



*Lake Nordenskjöld*

THE EASTERN RIDGES OF THE CORDILLERA AND THE PRE-CORDILLERA TO THE WEST OF CONTRERAS RIDGE.

[Face p. 973.]

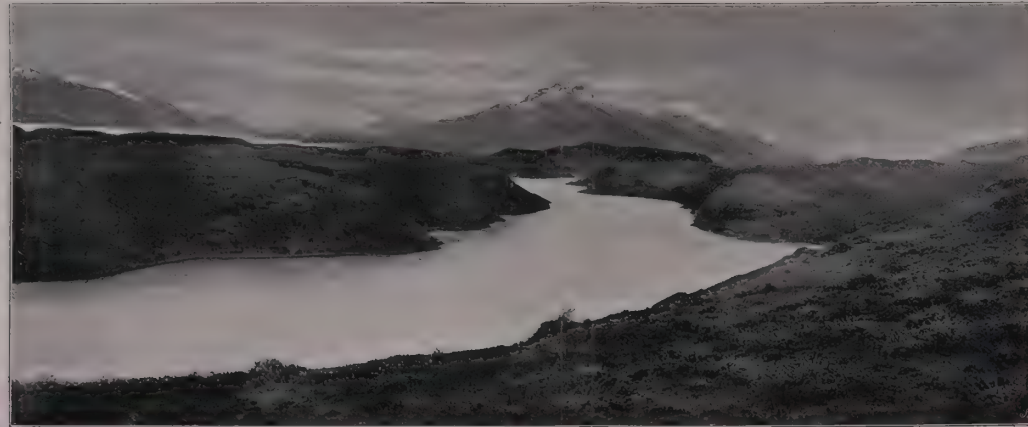


*Mount Balmaceda.*

*Mount Chacabuco.*

FIG. 1.

*Last Hope Inlet.*



CONSUELO COVE IN LAST HOPE INLET.

*Mount Rotunda*  
(980 m.; 3215 f.).

FIG. 2.



LAKE PINTO CUT BY PARALLEL 52° SOUTH LATITUDE.

[Face p. 978.]





*Baiguales Hills.*

*Vizcachas Table-land.*

*Coile Valley.*

*Latorre Table-land to the S. and S.E.*



PANORAMIC VIEW TAKEN IMMEDIATELY TO THE EAST OF THE BEND OF RIVER VIZCACHAS.

*Moraines to S.E. of River Vizcachas.*

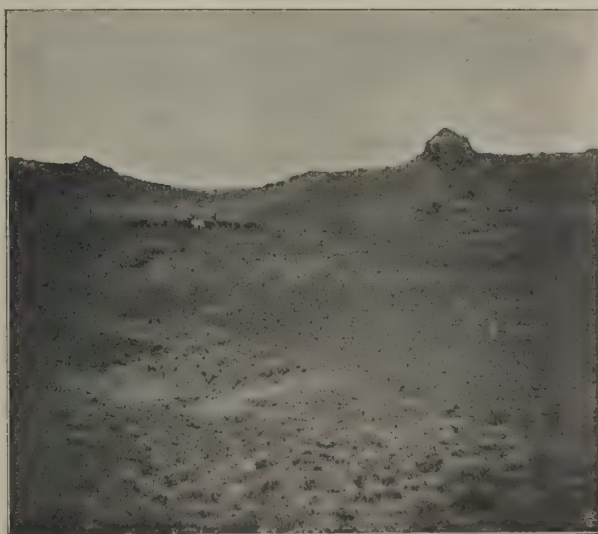




by the eastern foot of Palique hill, 480 metres (1575 feet)—which is a remnant of the Patagonian tertiary tableland, isolated by erosion, and surrounded at the south-west by a well-preserved moraine. The tributaries of the river Coile also flow round a remnant of the same volcanic table-like hills called Sierra Chica, 750 metres (2461 feet), which is continued to the E.S.E. until it reaches the general level of the tableland. To the south and south-west of these hills extends the ancient outlet of the old lake which formerly occupied this vast depression, an excavation bounded to the south by the continuation of the tertiary Patagonian tableland, and in the north-eastern cliffs of which rises the southern arm of the river Coile, the bend of the river Vizeachas penetrating at an acute angle between this arm and the northern one, in a ground covered with well-preserved moraines, where are indicated the advance and retreat of the glacier which covered the old lake. In these mounds, and between small lakes and pools, the continental divide at present occurs. Between the waters which flow to the river Vizeachas at its bend, 260 metres (853 feet), and those which flow to the east to the river Coile, the ground is quite level. In March 1899 the waters of the river Vizeachas were running

only at three feet below this level, and it is ascertained that in epochs of rain and flood the water flowing down from the tableland runs indistinctly to the two oceans. The Chilian Expert has nevertheless affirmed that his boundary line runs along *all the highest crests of the Andes which divide the waters*, an assertion rather hazardous, and which can only be the result of pre-conceived ideas.

Plate CXXXVIII.—a panoramic photograph taken by the Argentine Expert near the bend—will show the reason of the Argentine refusal of such a line, based on a geographical absurdity. The river Vizeachas, when running to the west, meets rivers Baguales and Zamora, then turns sharply to the south by the terminal moraine of Lake Sarmiento, between the terminal moraine of Lake Maravilla



BASALTIC LAVA TO THE SOUTH-EAST OF  
VIZCACHAS TABLE-HILL.

and Cazador Hill—another cretaceous isolated hill, 930 metres (3051 feet)—and, bending westward, empties into Lake Maravilla, leaving to the south Solitario Hill and to the north Ballena Hill. To the south of Solitario Hill rise the crags of the cretaceous bed which terminates in the south in Dorotea Hill. Between these hills and the western edge of the tableland continues the continental divide. From the edge of the tableland flow some streams to the Coile and Turbio rivers; the northern affluent of the river Gallegos, which flows to the Atlantic; and some others to Guillermo; Tres Pasos and Edelmiro streams, which flow to the Pacific by Lake Maravilla, Last Hope Inlet and Disappointment Bay (Bahía del Desengaño). To the south of Lake Maravilla rise Castillo, Campanilla and Cueva hills, which terminate in plains extending to Last Hope Inlet, represented in the figure on page 974.

This region between the two boundary lines can be divided in zones according to their orographical and geological characters, to make apparent the value of the claims of the two Experts.

1. The *Andean Zone*, formed by the main chain of the Cordillera de los Andes—constituting a rocky and ice-covered barrier, of a general height of 2500 metres (8202 feet), which ends in the Sarmiento Peninsula—and by a lateral eastern chain, broken into isolated sharp-peaked mountains such as Mount Stokes, the mountains situated to the west of Lakes Dickson and Hauthal, Mount Donoso and Mount Balmaceda, which have between them transversal broad and deep valleys. The interval between those mountains and the main chain is filled by the *inlandeis*, the water resulting from the melting of which flows to the east.

2. The *Intermediary Zone*, which, on the west, is formed south of Lake Argentino by the Pre-Cordillera, consisting of short ridges or isolated mountains upon which are table-like hills, and to the east, by the crags of the cretaceous beds which have not been so folded as the western beds by the tertiary granite, and which may be considered as the eastern foot-hills of the Pre-Cordillera. The culminating and most striking mountain in the western part is Mount Paine, which presents several sharp peaks, like towers and needles formed by granite after the destruction of the cretaceous slates, the dark remains of which contrast with the whiteness of the eruptive rock. To the south of Lake Maravilla lie Mounts Tenerife and Chacabuco, which belong to the same zone as the western part of Moore Monument, to the south of Last Hope Inlet. Between the Pre-Cordillera and the most easterly part of the Cordillera there is the continuation of the longitudinal depression so frequently referred to, with a



breadth of six miles in some parts, where are alluvial plains, lakes and rivers running in a north and south direction. The table-like hills are those of Guido, Contreras, Toro, Ballena, Castillo, and the western part of the Cazador Hills;



BALLENA HILL AND THE EASTERN MORAINES OF LAKE MARAVILLA.

Cueva Hill, the eastern part of Moore Monument, and to the south of the transversal depression of Obstruction Sound and river Gallegos, Mounts Rotunda and Palladium, which reach an altitude of 900 to 1000 metres (2953 to 3281 feet), the first being cut by parallel  $52^{\circ}$  as is Lake Pinto (Plate CXXXVII. Fig. 2). Dr. Nordenskjöld says about them :—

P. 407.—“ South of the lake, down towards Last Hope Inlet and Disappointment Bay, we find low land and mountains of the intermediate type. The bay last named—the only known part of the western channels (except the Straits of Magellan) that penetrates into a region which certainly does not belong to the Cordillera proper—is situated in a latitude corresponding to that of the valley of the river Gallegos.”

These are isolated flat-topped hills, separated by wide eroded valleys, plains or lakes, and to the east rise other isolated inclined hills—as Solitario, Cazador and Dorotea—which reach an altitude of 800 to 1000 metres (2625 to 3281 feet),



and which are uplifted on the west and broken longitudinally and transversally, forming broad valleys.

In this last section, in the region of the low plains and the Patagonian tableland, there are several points which may be taken as forming a continental divide according to the theories of the Chilian Expert, in the plains where the morainic waves reach 20 to 30 metres (66 to 98 feet) of altitude, which Señor Barros Arana considers as the highest crests of the Andes dividing the waters ; and in which rain forms small lakes, the outlets of which continually change according to the level, flowing sometimes to the Atlantic and sometimes to the Pacific. By its orographical and geographical features, the character of the

eastern part is entirely that of the general plain.



THE TABLELAND TO THE SOUTH-WEST OF  
RIVER SANTA CRUZ.

3. The third section is formed by *the Pampa or the Tableland*. The volcanic tableland of Baguales and Vizcachas, extends to the eastern tableland, which to the south and south-east is excavated with broad depressions, with a breadth of more than thirty miles, where rise the tributaries of the river Coile ; to the south recommences again the tableland, the cretaceous edge of which attains an altitude of 1000 metres (3281

feet). When seen from the west it has the appearance of a mountainous ridge, but it is really nothing of the kind, being merely the western part of the cliffs of the undulated tertiary Patagonian plain, which gently inclines to the east as far as the Atlantic, forming in that direction three and sometimes four steps.

This tableland extends to the north and east, sloping very gradually towards the Atlantic, furrowed by deep, dry channels, outlets of the former western lacustrine excavation. Emelkaiken, in the valley of Gallegos, lies at an altitude of 60 metres (197 feet) ; Juan Rivera farm, near the river Coile, at 75 metres (246 feet) ; Las Hortigas at 105 metres (344 feet) ; Mayer farm at 110 metres (361 feet) ; Anaiken at 140 metres (459 feet) ; Coronel at 190 metres (623 feet) ;

and following the river Coile towards the west, the *divortium aquarum* is reached at 260 metres (853 feet) above the sea, to the east of the bend of the river Vizeachas. The tableland represented in the figures inserted herewith extends for a considerable distance to the north.

This short sketch of the orography of that part of Patagonia shows that all the mountains, hills, plains, lakes, lagoons, rivers and streams, situated between the main chain of the Cordillera and the glacial plains and tableland, are to the east of the Cordillera but to the west of the so-called continental divide, and that, notwithstanding the drainage to the Pacific, these physiographical features cannot be considered in any way as forming the western slope of the highest crest of the Andes to which the Chilian Expert refers. Plate CXXXIX., representing the ground where he says that the range runs, i.e. the tableland of Latorre, shows the incomprehensibility of his statement to his Government in order to make possible Her Britannic Majesty's Government's arbitration respecting landmarks supposed to be located in mountains which have no actual existence.



THE TABLELAND BETWEEN LAKE ARGENTINO  
AND RIVER VIZCACHAS.

The Chilian explorers, Rogers, Ibar and Bertrand, as already said, have ascertained that the region between the Argentine and the Chilian proposed boundary lines lies to the east of the Cordillera de los Andes. The opinion of Dr. Nordenskjöld has been quoted in further support of this conclusion, and it is well to add another important authority, that of Dr. Steinmann, who in 1882 visited this region as far as Lake Argentino. In his several accounts of the journey he made for geological purposes,\* he has expressed the opinion that he travelled at the eastern foot of the Cordillera:—

\* Neues Jahrbuch für Mineralogie, Geologie und Paläontologie, Stuttgart, 1883.

P. 257.—“Now for a few words on the latest Post-Tertiary formation of Southern Patagonia. If one travels through the country *at the foot of the Cordilleras*, as I have done, he must be struck with the remarkable recurrence of boulders, everywhere, of rocks foreign to the country. Crystalline rocks, such as granite, gneiss, mica-schist, etc., are seen, as small pebbles, everywhere in great heaps, or, as in the low grounds which *lie to the east from the Cordilleras*, they are found in separate blocks which are scarcely inferior in size to those found in the low plains of North Germany. Even if the analogous phenomena of the Baltic and Alpine Glacial epoch were unknown to us, we should not be long in doubt as to the cause of the scattering of the foreign rocks. For the most southern portion of the American Continent is, in fact, still in the Glacial Period.”

Dr. Steinmann reached “at the foot of the Cordilleras” a low ground, which in about  $51^{\circ}$  S. lat. extends from the Atlantic Ocean to the Cordillera. He has also observed that the drainage of this region is both towards the Atlantic



MORaine TO THE SOUTH-EAST OF RIVER VIZCACHAS.

and towards the channels of the Pacific Ocean, as he says that “*the watercourses descending from the eastern slope of the Cordillera discharge into the channels which break through the Cordillera from the west*,” and adds that “*the watershed between the two oceans reaches an altitude of only some few hundred feet*.”\* These are the only travellers that had visited the region up to 1898, and they confirm the results of the Argentine explorations.

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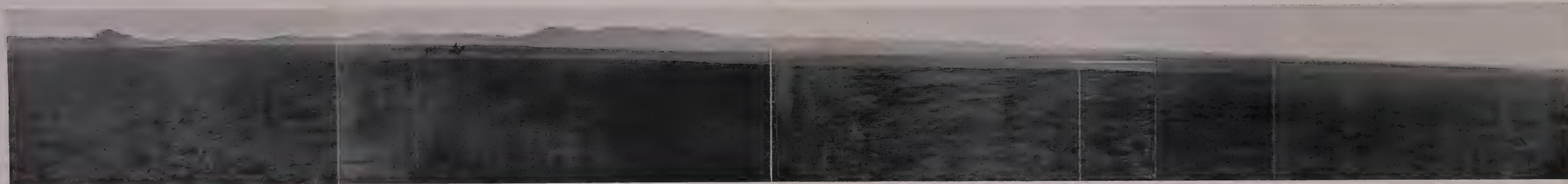
\* Verhandlungen 1885, p. 44, Gesellschaft für Erdkunde zu Berlin.



*Baguales Ridge.*

*Vizcachas Table-land.*

*Valley of Vizcachas and Coile.*



BAGUALES RIDGE FROM THE PLAINS OF THE CONTINENTAL DIVIDE AT THE NORTH-WEST EDGE OF LATORRE TABLE-LAND.

(Face p. 979.)

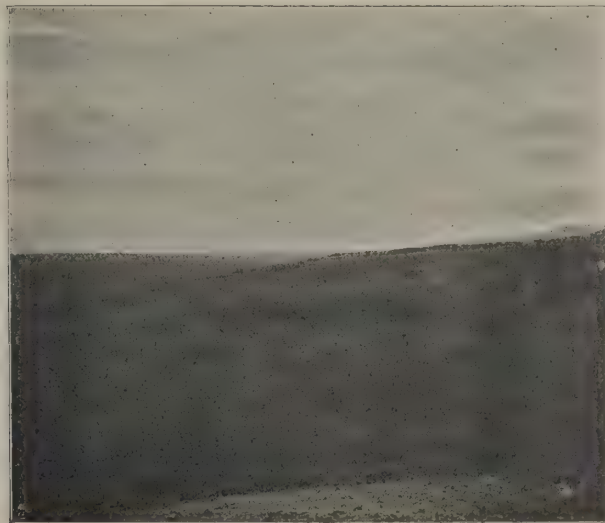


It is unnecessary to adduce further evidence to disprove the Chilian Expert's erroneous statement that, to the north of Last Hope Inlet, and extending towards the east, there are, in the region where he planned his boundary line, branches of the Cordillera constituting the main chain of the Andes and the highest crest of the Andes which divide the waters. But as he refers in the Record to the northern part of Last Hope Inlet, it is important to show the true character of the land to the east and south-east, as far as latitude  $52^{\circ}$  S., where the frontier, as regards its north-and-south direction, comes to an end. Señor Alejandro Bertrand has stated that there "the plain replaces the Cordillera, and extends from one ocean to the other," which is perfectly correct, and the Chilian Map represented to Her Britannic Majesty's Government by the Chilian Representative shows these features as on the Argentine map. Dr. Nordenskjöld in his Geological Map of the Magellan Territories\* confirms the fact, drawing to the north the tertiary "Meseta de Latorre," called by the Chilian Expert "Cordillera Latorre," which commands the glacial deposits that have filled the transversal plain.

The fact is that between the Latorre tableland and parallel

$52^{\circ}$  there extends a marshy valley where may be seen the terminal moraines of the pleistocene glacier, a valley which is slowly rising, as well as the neighbouring region, and which, not many centuries ago, was undoubtedly occupied by the ocean.

When the Spanish navigator Ladrillero, in 1557, entered the channels *to the west of the Cordillera*, in search of a passage to the Atlantic, he found low-lying lands, and in them a channel more than forty-five miles long by four and a half miles wide, penetrating in an E.N.E. direction. In 1830 Lieutenant Skyring



THE TABLELAND BETWEEN RIVER COILE AND RIVER SANTA CRUZ, TO THE WEST.

\* Stockholm, 1889.



and Mate Kirke, of the *Beagle*, explored the same regions, and observed a vast expanse of water divided by a low isthmus, cut by a river which drained the remains of the Ladrillero channel. The uplift of this isthmus appears to be of very recent date, judging by the young trees referred to by Kirke.\* That sheet of water is known as Lake Balmaceda; to the south of it is found another of about the same size, Lake Pinto; and to the east there are other smaller ones, between various lines of moraines, more or less destroyed, which separate the waters that, from the northern and southern plateau, flow westward to feed these lakes, and eastward to form the river Gallegos. There may be observed a characteristic glacial landscape; the boulder clay, which is seen very distinctly in the Blanca lagoon, fills the valley, being displayed in large patches in the same way as in all the other northern valleys. The remnants of the dividing moraines in some parts do not attain 200 feet above the sea-level, and abound in large, erratic, perfectly striated rocks.

The river Gallegos and its affluents flow in a capricious and winding manner, leaving on either side the marshy remains of the former fresh-water channel. If the English Channel is imagined to have become nearly dry and covered with boulder clay deposits, with a river winding its way in its centre towards the east, receiving streams from the cliffs of the two coasts, and little hillocks, like those in some parts of London, separating the western streams from small lakes overflowing to the Atlantic, some idea of the transverse valleys of Patagonia may be formed, the western Atlantic being replaced there by the Pacific channels.

Lake Balmaceda has an area of about forty square miles, and is partly fed by the waters of other smaller lakes and by streams. Between the most eastern of these lakes and a group of smaller ones which send their waters to the river Gallegos, there is a glacial deposit, barely sixty feet wide. In times of flood, these small lakes communicate with each other, and for the time *unite the waters flowing to the Pacific with those which go to the Atlantic*. It also seems that one of the affluent rivulets of Lake Balmaceda is thrown off from the river Rubens, an affluent of the Gallegos. This river and its affluents have a winding channel, leaving lagoons on either side, which are the remains of the lost channel now replaced by the valley. An idea of the outline of the valley may be gained,

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\* If the soundings taken by the officers of the *Beagle* in 1829 are compared with those taken by the officers of the *Magallanes*, it will be found that the bottom in the bays or channels to the east of the Cordillera appears to be rising; and the discovery of beds of *Mytilus edulis*, quite fresh, at six feet above high-water mark in Consuelo Cove, in Last Hope Inlet, is a practical proof of this rise.

bearing in mind some heights in the prolongation of parallels  $52^{\circ}$  in the region of the continental DIVORTIUM AQUARUM; proceeding on the parallel from east to west along the points of the frontier determined as landmarks, those heights are, starting from near landmark XXXIX., 80, 150, 140, 130, 120, 100 metres (262, 492, 459, 427, 394, 328 feet), up to Lake Pinto terrace between Lakes Pinto and Balmaceda, 45 metres (148 feet); to the north, the frontal moraines vary from 160 metres (525 feet) in the centre to 200 metres (656 feet) at the foot of the Dorotea Hill, which, notwithstanding its height (650 metres; 2133 feet), some Chilian geographers call "Cordillera Dorotea."

The accompanying photograph and Plate CXL. show whether it is possible



THE EASTERN COAST OF DISAPPOINTMENT BAY, SHOWING THE MOUNTAINS OF THE PRE-CORDILLERA TO THE WEST OF THE BAY.

to claim that there extends, at the spot fixed by the Chilian Expert as a frontier on parallel  $52^{\circ}$ , and on the north as far as Barranco or Dorotea Hills, any elevation whatsoever of the ground that is not merely a morainic mound, and whether there is the slightest indication of a range that can be considered as a spur of the Cordillera de los Andes. Mount Rotunda, which cuts the line of parallel  $52^{\circ}$  prolonged to the channels, *belongs to the intermediate zone of the Pre-Cordillera*, but this mount is not under discussion, because the Argentine Expert has left it to the west of the terminus of his line on the said parallel, in order to give to Chile the coasts of the sea inlets, since, in his opinion, the feature foreseen in the Protocol of 1893 really exists in that region.

### 3. REMARKS ON THE ARGENTINE AND CHILIAN PROPOSED BOUNDARY LINES.

Once the map and photographs of that region have been examined, it will not appear surprising that the Argentine Government should have considered this region as forming a part of their possessions, *and that they should have ordered the sale of lands under their sovereignty according to the Treaty of 1881 and Protocol of 1893, since these lands are not only situated to the east of the main chain of the Andes, but likewise to the east of the whole of the mountains, i.e. altogether outside the Cordillera.*

By a resolution of May 16, 1892, the Argentine Government sold to Señor Adolfo Grumbein 400 square leagues (3600 square miles) of land, which the purchaser selected, in their greater part, *in the region which the Chilian Expert now pretends to be situated in the Cordillera de los Andes, and to the west of its main chain*, these lands being registered and Argentine deeds given on December 27, 1895, and November 12, 1896. The sale was widely announced, and the Argentine official publications inserted the documents appertaining thereto; but the *Chilian Government did not make the slightest observation.* It was a question of lands in Eastern Patagonia, and Chile's jurisdiction in Eastern Patagonia *only commences to the south of parallel 52° as stated by Señor Bertrand.\**

But it might be alleged that Chile also exercised jurisdiction over the same regions; and it is, therefore, necessary to point out the true facts on this subject. Towards the middle of 1898, some unauthorised occupiers of the land sold to Señor Grumbein alleged to the Argentine Authorities of Santa Cruz that they occupied the said lands by permission granted by the Authorities of the Chilian Province of Magallanes. At the same date (1898), a periodical of Punta Arenas published the following document:—

“Ministry of Foreign Affairs, Santiago, March 22, 1895, No. 767. I have received Your Excellency's official letter No. 58, dated February 26 last, and the sketch accompanying the same, relative to the concessions made by Your Excellency at the points mentioned in that note. From the careful surveys which the Department has had made through the *Chilian Boundary Commission and the Office of Public Works*, it results that the concessions granted by Your Excellency are in territories that are evidently Chilian, *and at a very considerable distance from the Argentine Republic boundary line.* I have therefore nothing to observe respecting what Your Excellency has done. I am etc., LUIS BARROS BORGONO.

“To the Governor of Magallanes.”

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\* Anuario Hidrográfico, p. 273, Chile, 1886.



*Southern Table-land.*

*Mount Botania.*

*Eastern Ridge of the Cordillera.*

*Mount Moore Monument.*

*Mount Ralmaceda.*

*Mount Chacabuco.*

*Valley of Rio Gallegos.*

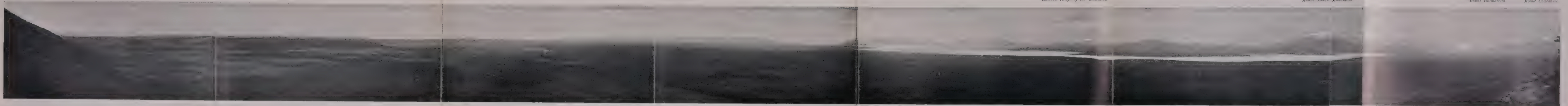
*El Estero Stream.*

PANORAMA FROM DOBOTE HILL.

*Plains of Diana.*

*Last Hope Inlet.*

*Sea-point.*





The note from the Governor of Magallanes to which the Chilian Minister for Foreign Affairs refers, has not been published, neither had the note just transcribed of the Chilian Minister been found inserted, in spite of searches made, in the official publications of Chile, nor in the daily press ; both have been kept back for three years, and after that period their existence has been revealed only by a private periodical in Punta Arenas (Sandy Point). The document is not clear, but if, as stated by this periodical and by the occupiers whose eviction was demanded by the Argentine Governor of Santa Cruz, the note and the resolution of the Government of Chile referred to lands sold to Señor Grumbein, to the north of parallel 52°, away from the coasts of the inlets and to the east of the Cordillera de los Andes, the Argentine Government, being unaware of those internal decisions, could not protest against this act in violation of the Treaties of 1881 and 1893, but carefully kept secret until 1898. When the document was made public there had already arisen the differences submitted to Arbitration, and the Argentine Government, confident in their rights, preferred to consider as non-existing what was only made known by a Punta Arenas newspaper, without any official character. Even to-day it is impossible to say with certainty whether the notes alluded to are authentic or not, or if they really refer to the Argentine lands sold to Señor Grumbein. In fact, when the Chilian Minister in Buenos Aires made some remarks in 1898 on that sale and on others, he did not mention the official letter of the Authorities of Magallanes nor the resolution of his Government, and this silence proves that both communications, if they really existed, were afterwards considered by the Chilian Government as based upon erroneous data. None of the lands sold by the Argentine Government are within Chilian territory, according to the dividing line of the Treaties, which is the one planned by the Argentine Expert.

During the negotiation of the Protocol of 1893, being difficult to determine a boundary for the coasts of the inlets, as no precise information about them was available at the time, the Chilian Expert suggested *that the nearest elevation should be fixed upon*. Although this might be considered too vague, since it was not stated which elevations were to be taken into account, the idea of the Chilian Expert becomes more definite when considering what had previously taken place. When in 1876 Señor Barros Arana, then Minister Plenipotentiary of Chile, tried to settle the boundary question with the Minister for Foreign Affairs of the Argentine Republic, a basis was drawn in which the line leaving to Chile the coasts of the Straits of Magellan should start from Mount Dinero and con-



tinue over "the highest elevations of the chain of hills which extends westwards as far as the height named Mount Aymond in  $52^{\circ} 10'$  S. lat." From this point the line would reach the Cordillera de los Andes, leaving to Chile a continental zone which the Minister Señor Barros Arana, in the communication he addressed to his Government on July 10, 1876, estimated to be over 300 square leagues. In all these negotiations, *the water-parting was not discussed; the frontier line would pass over the greatest elevations of the chain of hills close to the Straits*, the object being to leave those coasts to Chile.

When in 1881 definite sanction was given to the boundary Treaty, it was agreed that the limit between the two countries should be the Cordillera de los Andes, on the line of the high summit dividing the waters of the Cordillera, as far as parallel  $52^{\circ}$  S. lat., and a line was also agreed upon from Point Dungeness to Mount Aymond, from there to the intersection of meridian  $70^{\circ}$  west of Greenwich, with the said parallel  $52^{\circ}$  S. lat., and thence up to the *divortium aquarum* of the Andes. No mention whatever was made of *the continental or local watershed* on "*the chain of hills between Mount Dinero and Mount Aymond*"; the highest elevations were there chosen, as was the case with the high summits of the Cordillera de los Andes, i.e. the crest of the main chain of the Andes, respecting which the division of waters was only mentioned in order to determine the exact sharp edge or crest of that high range, in accordance with the knowledge then possessed of the Cordillera, when the *divortium aquarum* of the Andes was considered as coincident with the traditional dividing edge.

Speaking of the line of 1876, Señor Bulnes has said that it took its course from Cape Vírgenes in the Atlantic to Mount Dinero, thence to Mount Aymond, from Mount Aymond to Mount Palladium, and from the latter to the *divortium aquarum* of the Andes at parallel  $52^{\circ}$ , which range he therefore considers as situated to the west of Mount Palladium. "The differences between this line and that adopted in 1881," Señor Bulnes adds, "is that the latter passes ten minutes to the north in the space comprised between Mount Aymond and Mount Palladium." According to this Chilean authority,\* contrary to the contention of the Chilean Expert, the *divortium aquarum* of the Andes mentioned in the Treaty of 1881 is met with to the west of Mount Palladium, in the islands and peninsulas formed by the Cordillera and the Pre-Cordillera, and surrounded by the Pacific waters, as the Argentine Expert upholds. A proof

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\* Gonzalo Bulnes, *Chile y la Argentina*, Santiago, 1898, p. 49.

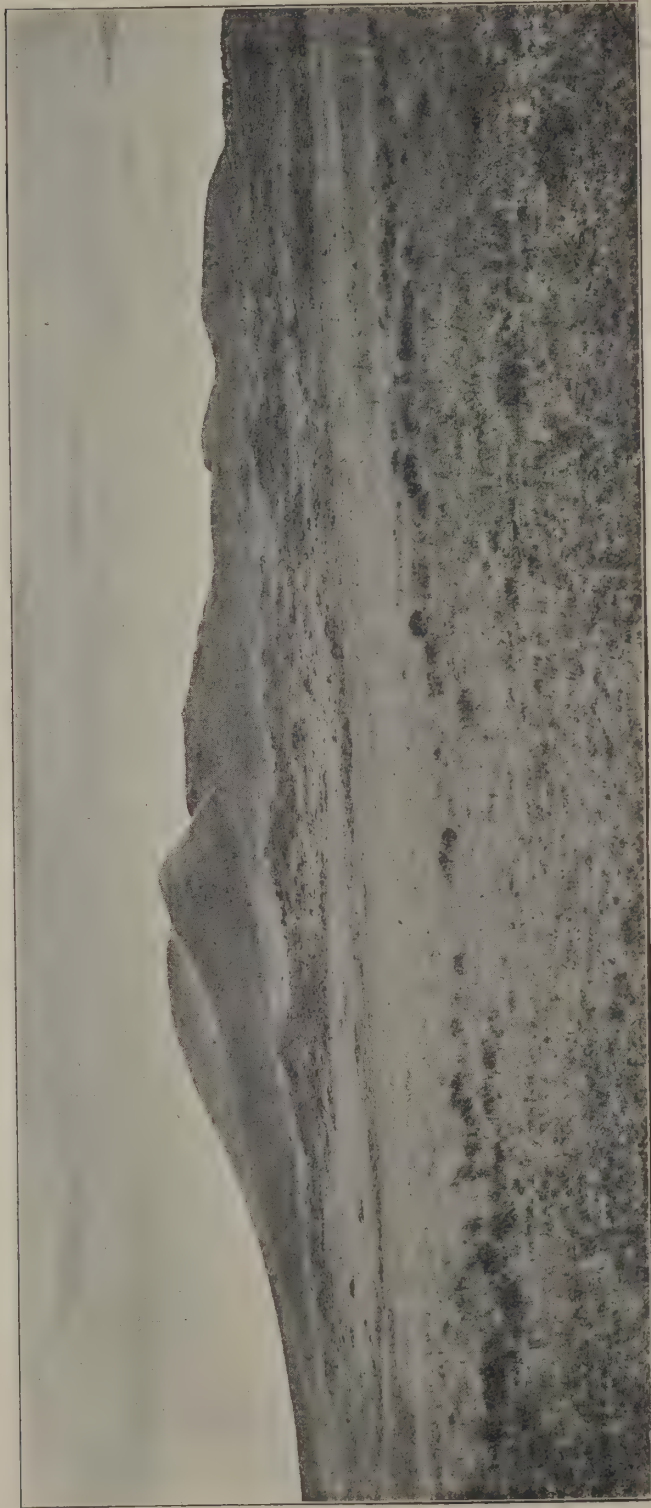
that no attempt whatever was made in 1881 to determine the boundary *along the hydrographic line*, but along the immovable natural orographical frontier, is to be found in the fact that when the line between Point Dungeness and Mount Aymond was to be marked out, no effort was made to carry it over the headwaters of the streams that fall into the Straits of Magellan and the river Gallegos. *The assistants of the joint Argentine and Chilian Sub-Commissions proceeded to mark out between Point Dungeness, Mount Dinero and Mount Aymond a series of straight lines*, among the principal elevations found in a general direction between the two hills named, *without attempting to carry it over the edge of the general tableland in Patagonia, situated somewhat more to the north: the object of the line being exclusively to leave within Chilian territory the coasts of the Straits, it was traced over small glacial hillocks, or over the remains of a denuded tableland, generally in the line of one of the levels of the transversal depression of the Straits, and always cutting the waters that descend from the tableland to the Straits.*

As a further proof that the Chilian Expert did not take into account the headwaters of the streams, it may be remembered that when the Argentine Expert stated, in the Record of April 28, 1897, that he would give his approval to the line in that region, as he had previously received the authority of his Government to do so, Señor Barros Arana answered that—

“The data previously existing with regard to the said zone, and corroborated by the details and explanations communicated by the Chief of the Fifth Chilian Sub-Commission in his Report of January 9, 1896, with which he sent the respective plan and records, sufficed him to approve of the line marked out by the said Sub-Commission between Punta Dungeness and the intersection of the parallel 52° S. lat. with the meridian 70° W. long. of Greenwich, and that, in his opinion, this line corresponded to the correct interpretation of the Treaty of 1881.”

The Government of Chile assented to the opinions of their Expert when empowering him to approve the delimitation of that part of the frontier. As may be seen, not a single word was said about the division of the Chilian and Argentine waters in that section of the boundary, and yet, had it been adopted, it would not have sensibly modified the boundary in its general course in those places. The fact is, that in spite of the pre-conceived ideas of the Chilian Expert, the orographical boundary made itself imperative through its excellence, and was therefore adopted.

The suggestion of Señor Barros Arana, in 1893, that in the event of the inlets penetrating to the east of the Cordillera, there should be fixed, as inter-



MOUNT AYMOND, A POINT OF THE LINE AGREED TO IN 1881 IN ORDER TO LEAVE WITHIN CHILIAN  
TERRITORY THE COASTS OF THE MAGELLAN STRAITS.



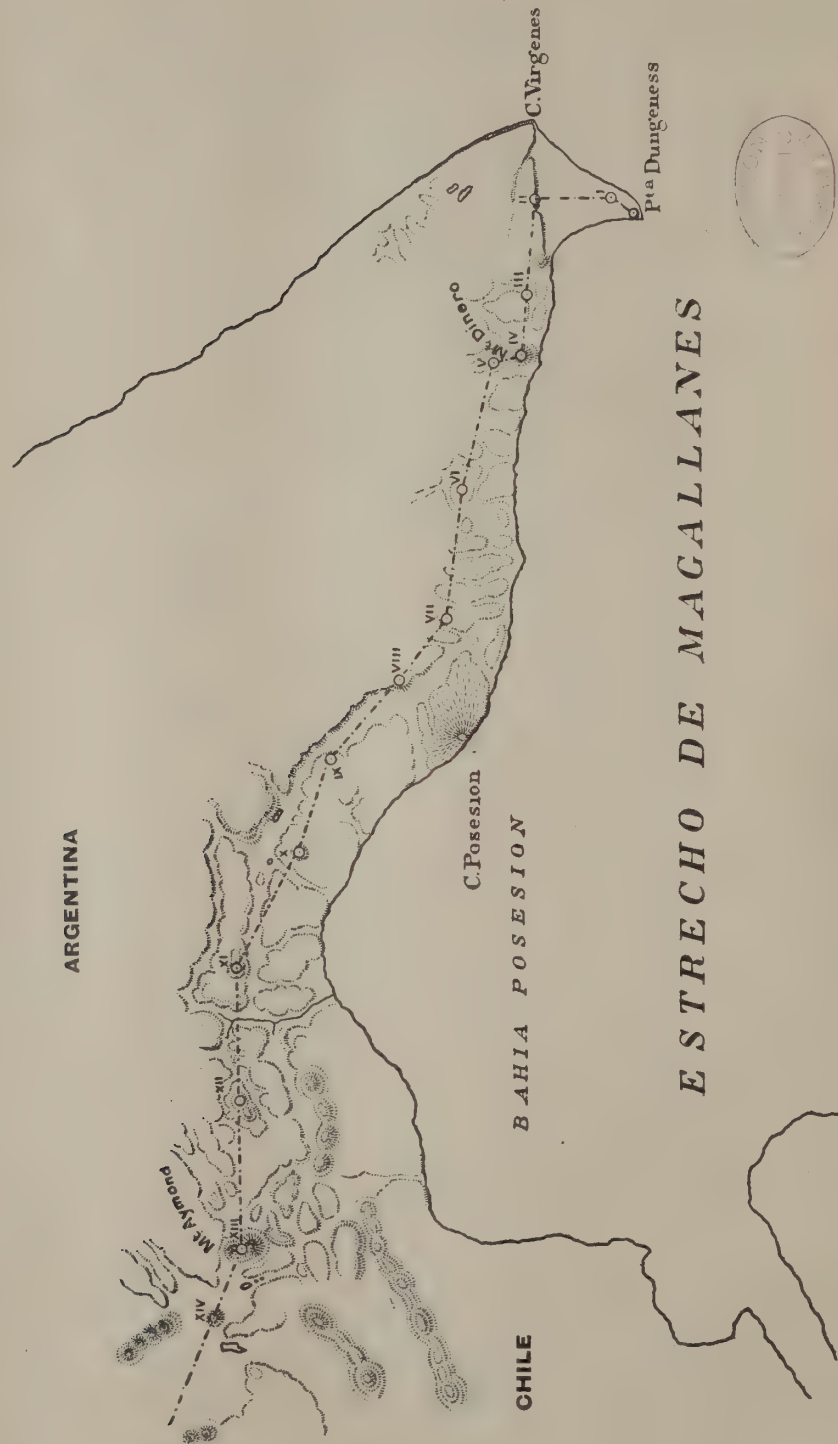
national boundary on their coasts, a line over the heights near these waters, was based upon the same idea that he had in view when he agreed in 1876, as Minister Plenipotentiary, that the line which should leave to Chile the coasts of the Straits should pass over the greatest elevations in the neighbourhood of those coasts. If such had not been his idea, he would not have approved the work of the joint Sub-Commissions, who marked out the line as shown in the Record of April 28, 1897, and would certainly have proposed the boundary in the neighbouring tableland where the *divortium aquarum* is produced between the waters of the Straits of Magellan and those of the river Gallegos.

Just as it was determined, in 1881, that Chile should possess the coasts of the Straits of Magellan, confining her jurisdiction on the continent to a narrow zone, determined by the nearest elevations of the ground, the same limitation was kept in view on its being resolved, in 1893, that *Chile should only have possession of the coasts of the sea inlets in the proximity of parallel 52° S. lat.* The Argentine Expert affirmed this to be the case in the Record of September 1, 1898, considering that, as these inlets really penetrated to the east of the Cordillera de los Andes, and it was not possible to extend the line on the parallel as far as the *divortium aquarum* of the Andes, in order to leave to Chile these coasts, it was necessary to adopt a line analogous to the one agreed upon by the Experts, and approved by the respective Governments, between Mount Dinero and Mount Aymond, and therefore it was proposed that—

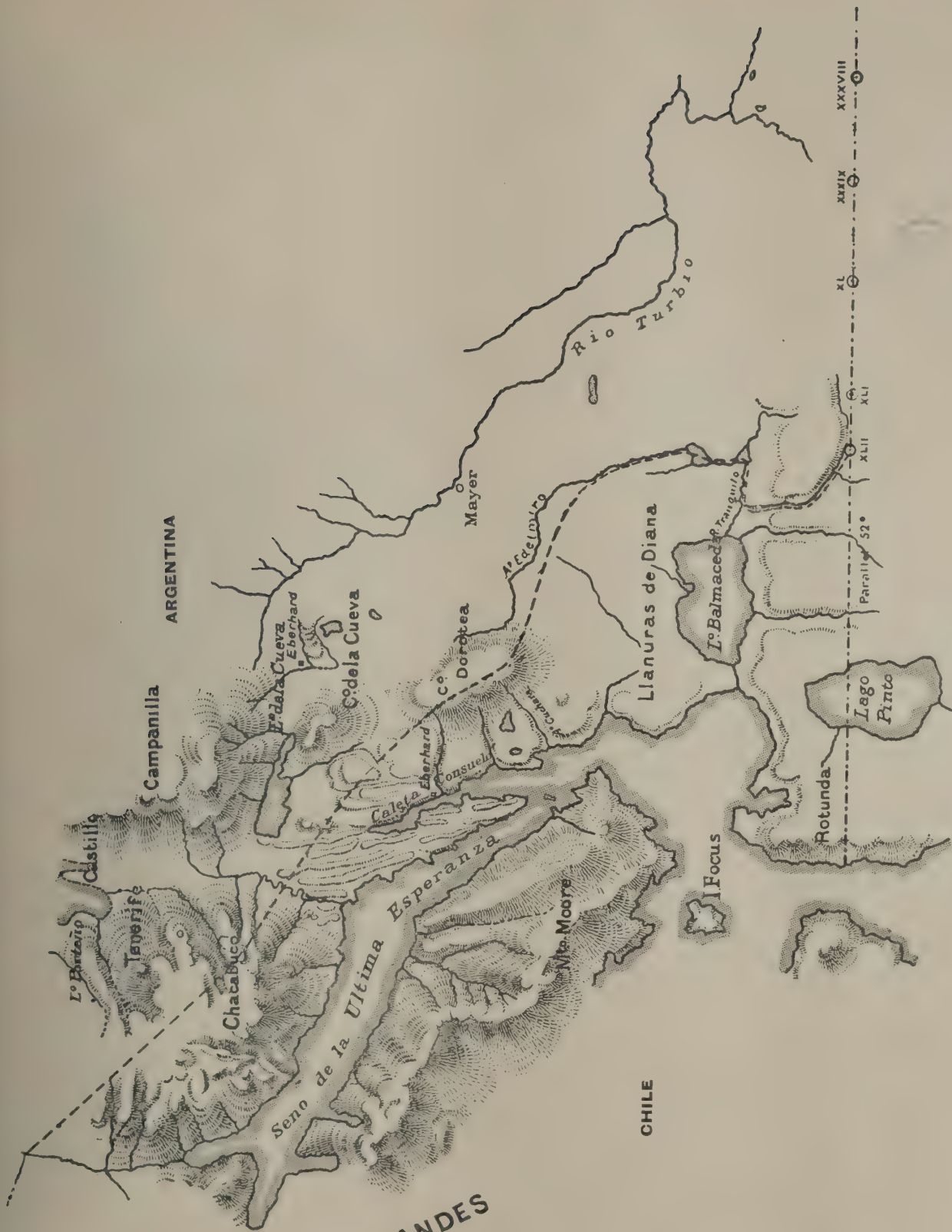
“Said line shall start from landmark XLII., provisionally marked by the Argentine Sub-Commission; shall follow northward along the southern affluent of river Tranquilo which flows to the north, close to said landmark, until it strikes river Tranquilo; and shall continue along the river Tranquilo until reaching the small lagoon from which said river issues; shall cut said lagoon in the direction of the stream which flows into it on the north, and which issues in its turn out of a second small nameless lagoon into which empties the river Edelmiro. The divisional line shall follow along this stream till it leaves the line of glacial hillocks which bound on the north the plains of Diana; it shall continue along the border of said hills, as far as the south-westerly point of the Dorotea tableland, and thence in a north-westerly straight line, passing between the La Cueva lagoon and the Consuelo creek, until reaching the confluence of the river Geikie with the river Serrano. It shall follow said river Geikie until it strikes the slopes of the crest line of the main range of the Andes.” \*

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\* The translation of the deeds presented to the British Government by the Argentine Government contains several evident “erreurs de plume,” which are noted in this statement, among them that which says ice-topped hills which bound on the north the plains of Diana, instead of glacial hillocks, in defining the line proposed by the Argentine Expert in order to leave to Chile the coasts of Disappointment Bay.



ARGENTINE-CHILIAN BOUNDARY LINE, SETTLED ACCORDING TO THE TREATIES OF 1881 AND 1893.



CORDILLERA DE LOS ANDES

ARGENTINE PROPOSED BOUNDARY LINE IN THE NEIGHBOURHOOD OF PARALLEL 52°,  
ACCORDING TO THE TREATY OF 1893.



The starting-point of this line *is at a distance of twenty miles from the coast*. Following the natural features as much as possible, such as the valley of the rivers or the centre of the lagoons, and the edge of the tableland and ridges, the boundary approaches the coast at the *nearest point* to within two and a half miles, thus leaving a greater stretch of coast there than in the Straits of Magellan, where the line adopted and considered by the Chilian Expert, as having the features stipulated in the Treaties, is in some places within two-thirds of a mile, and, at the most distant point on Mount Aymond, seven and a half miles from the high-water line.

The Chilian Expert, on his part, disregarding all these antecedents, claims to incorporate to his country, contrary to all geographical, economical and political laws, a large zone of land under Argentine control, and proposed the line of the South American continental divide, an impossible boundary line, which recedes at first twenty-five miles from the coast, approaches to eight, and then retires to sixty miles, enclosing territories under Argentine jurisdiction, declared to be so by the Treaties, and which have been *and are occupied in virtue of the laws of that nation without any protest whatever on the part of the Government of Chile*.

The Chilian claims are so groundless that as a last resource in the Statement read before the Tribunal it has been tried to apply to the Argentine settlements some rules discussed in International law as bearing on *res nullius*. For so doing the Argentine cession of the channels to Chile is converted into a supposed occupation of deserts or abandoned territories, and the coasts of the said channels are extended to the inland regions as if they had no owner at all. This way of reasoning is only the natural result of the lack of arguments, based either on Treaties or geography.

The sketches in pages 990 and 991 show the boundary line accepted by the Chilian Expert in the Magellan Straits, and that which the Argentine Expert proposed in the neighbourhood of the parallel 52° S. lat. The Chilian Expert is not consistent with his ideas, as he makes his Magellan line to cut across waters, while in the Patagonian plain he looks for the continental divide at whatever distance it may be from the coast of the channels, the land near which can only belong to Chile. On the other hand, the Argentine line, traced so as to leave to Chile the coast, combines the same conditions as the line adopted in the Magellan Straits. The Chilian proposed line is contrary to the Treaties, while that of Argentina agrees with them.

## CHAPTER XXVIII.

*Summary*—1. TRANSVERSAL SECTIONS. GENERAL CONSIDERATIONS.

2. THE BOUNDARY FROM 23° S. LAT. TO MOUNT TRES CRUCES.
3. THE BOUNDARY FROM MOUNT TRES CRUCES TO 40° S. LAT.
4. THE BOUNDARY FROM 40° S. LAT. TO 52° S. LAT.

### 1. TRANSVERSAL SECTIONS. GENERAL CONSIDERATIONS.

THE Chilean Expert's erroneous conception of the natural boundary agreed upon in the Treaties of 1881 and 1893, has rendered the settlement of one of the easiest frontiers to be traced in a mountain range so complicated, that, in order to make the Arbitration possible, he has maintained that mountains rise where they do not exist at all. But the confusion resulting from those theories has been dispelled by the proofs presented in the preceding Chapters; and, if it were necessary to amplify them, a general review of the orographical character of the Cordillera de los Andes, by means of transversal sections, would answer this purpose—readily showing the accuracy of the whole Argentine line, the inaccuracy of the Chilean line in the points where it deviates from the former, and, at the same time, the change of opinions of the Chilean Expert on the main or central chain of the Cordillera de los Andes.

Señor Barros Arana, as a geographer, considers that the Chilean territory extends to the “west of the great Cordillera de los Andes,” and that the “culminating line of the Andes,” where “the snow never melts, constitutes a permanent barrier between Chile and the Argentine Republic, which is only broken by narrow and majestic defiles;” \* and, as Chilean Expert, he has stated that the Treaty of 1881 “confirms the traditional limit of the Cordillera, the natural boundary based on the physical condition of the ground,” and also that the culminating line to which he refers forms the central chain of the Cordillera.†

\* *Geografía Física*, ed. of 1871, p. 298.

† *Cuestión de Límites entre Chile y la República Argentina*, by Diego Barros Arana, Santiago de Chile, 1898, p. 1.

The graphic demonstration which follows will show once more that Señor Barros Arana, when planning his boundary line, has forgotten not only what he wrote as geographer, but also that the Treaty of 1881 orders the boundary line to run along the "culminating line" of "the great Cordillera de los Andes," where "the snow never melts," and that the "natural boundary based on the physical condition of the ground" is the one which forms a permanent "barrier between Chile and the Argentine Republic." Señor Barros Arana "on the contrary"—to use his own words—"when fixing the limit in the Cordillera de los Andes, where there exists a natural boundary, has raised difficulties which, owing to the clearness of the physical features and to the letter and spirit of the Treaty, are entirely groundless;" he pretends to have exactly complied with the Treaty of 1881 and the Protocol of 1893 by adopting the continental divide, though this divide is not the line agreed upon, and though it occurs in some places altogether outside the Cordillera de los Andes. He has thus proposed, for a great part of the frontier, a most unnatural boundary, and one completely opposed to the letter and spirit of those same Treaties which he pretends to have fulfilled.

## 2. THE BOUNDARY FROM 23° S. LAT. TO MOUNT TRES CRUCES.

The boundary between the Argentine Republic and Chile, along the Cordillera de los Andes, extends from parallel 23° to parallel 52° S. lat. The section from 23° to 26° 52' 45", having been settled by a special Commission, has not been submitted to Arbitration.

The Chilian Expert stated in the Record of August 29, 1898, that the general Chilian-Argentine frontier line in the Andes, which he proposed to his colleague, runs "along all the highest crests of the Andes which divide the waters," and that "said line is no other than the natural and effective dividing line of the waters of the South American continent, between parallels 26° 52' 45" and 52° S. lat." In referring, in the Record of September 3, 1898, to the line between parallels 23° and 26° 52' 45", he acknowledged that if the boundary should be fixed according to the state of things before the war that broke out between Chile and Bolivia, in 1879, that line would scarcely deviate from the one which the Argentine Expert proposed to him for that region in the Record of September 1, 1898. He added that this region having been incor-



porated to Chile by an internal act, he could not either accept or propose any line which may be contrary to what said act establishes, and, therefore, he confined himself to enumerating the points of the eastern boundary of Chile, between parallels 23° and 26° 52' 45" as fixed by the law of July 12, 1898, but without stating that those points are in the Cordillera de los Andes, as they ought to be according to the Treaties. As he indirectly accepted that the Argentine line, being traced along that Cordillera, fulfilled the requirements of the Treaties, he thereby disauthorised his own line.

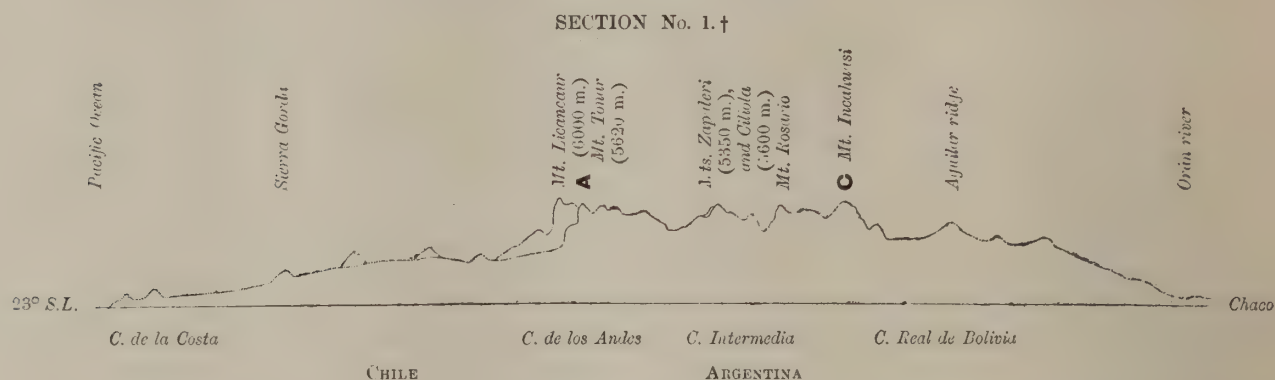
The Argentine Expert, in the Record of September 1, 1898, stated that the boundary line he would propose was wholly comprised within the Cordillera de los Andes: that the line must be located, according to the Treaties, in the predominating crest of the principal and central chain of the Andes, considered to be such by the most eminent geographers of the world, and that this principal chain was the most elevated, the most continuous, having the most uniform general direction, and the flanks of which shed the larger volume of waters.

The Chilian Delegates appointed for the settlement of the frontier between 23° and 26° 52' 45" S. lat., stated, when reporting to their Government on the meetings held at Buenos Aires in March 1899, that "*the Cordillera de los Andes, within which the dividing line ought necessarily to be traced,*" corresponds with and comprises the two chains, the western one, which runs to the south of Mount Licancaur, which the Argentine Expert considered as forming the true Cordillera, and the eastern one which runs to the south of Mount Incahuasi, considered by the Argentine Expert as forming part of the Cordillera Real de Bolivia; consequently they proposed, in the erroneous belief that they complied with the Agreements of 1881 and 1893, the eastern range, which, in their opinion, "*combines the conditions of height, continuity of elevated summits and division of waters contemplated in the Treaties,*" disauthorising thus the interpretations of Cordillera, main chain, water-parting and natural frontier given by the Chilian Expert, and accepting the conditions which the natural boundary determined in those Agreements must have, as explained by the Argentine Expert, i.e., the general predominance of height and normal water-divide in the mountain range.

The physiographical conditions of the ridge chosen by the Chilian Delegates to settle the frontier between 23° and 26° 52' 45" S. lat., render it necessary therefore, that the transversal sections should comprise this zone—although it

does not come within the differences submitted to Arbitration—as they can throw light on the exact meaning of the Treaties as regards the orographical and geographical features which are required for the Chilian-Argentine boundary line, in the opinion of the highest Chilian authorities. \*

*Section No. 1.*—Has been traced along parallel  $23^{\circ}$  S. lat., from the Pacific Ocean to the river Orán, in the eastern plain of Argentina, and represents the relief of the Cordillera de los Andes, of the intermediate chain, of the Cordillera Real de Bolivia, and of the lateral ridges to the east and west. Mount Licancaur, 6000 metres (19,685 feet), a little to the north of that parallel, is the culminating point in that section. Mount Tonar (No. 1), 5620 metres (18,439 feet), upon the parallel, is the first point chosen by the Argentine Expert to locate, according to the Treaties, the boundary landmarks, in the true Cordillera de los Andes, thus considered for three centuries ; while Mount Incahuasi, situated to the east

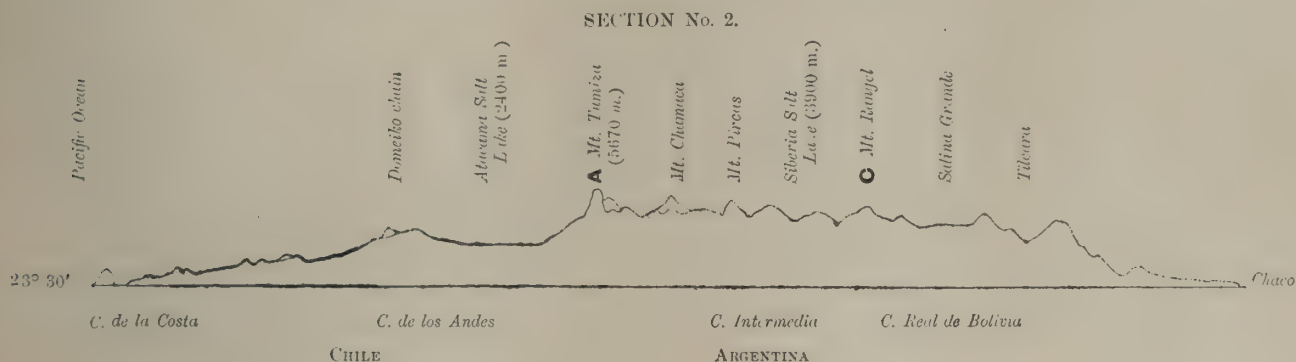


in the Cordillera Real de Bolivia, and considered by the Chilian Delegates as in the Cordillera de los Andes, is not a point of the Argentine-Chilian boundary. Mount Zapaleri, 5350 metres (17,553 feet), to the north of the parallel, was a point agreed upon between Chile and Bolivia, in the Treaty of truce of 1884, to determine the limits of provisional jurisdiction of the two countries. The Demarcating Commission at Buenos Aires in 1899, having fixed the starting point of the Argentine-Chilian frontier at the intersection of parallel  $23^{\circ}$  S. lat. with meridian  $67^{\circ}$  W. of Greenwich, this point is situated at Mount Ciliola, 5600 metres (18,373 feet), close to the south of Zapaleri.

\* These sections have been traced in Map XII. so as to facilitate the rapid comparison between the physical features of both boundary lines.

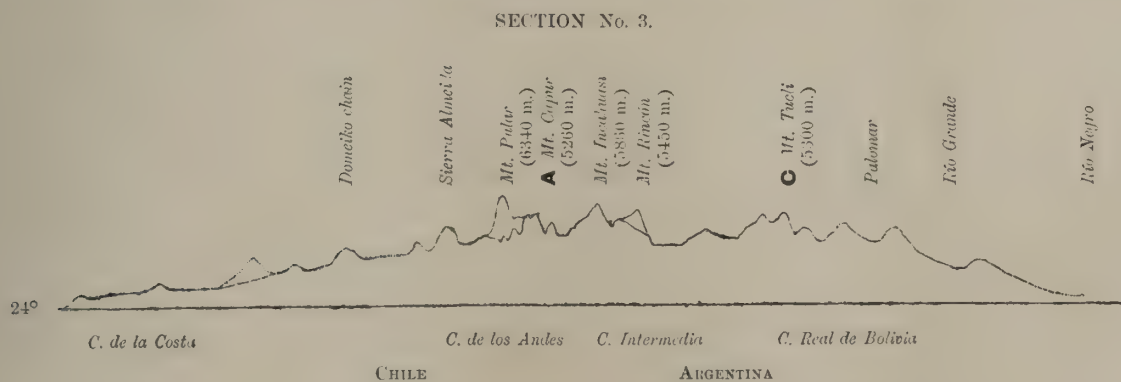
† In all these sections the point by which the Argentine line passes is determined thus **A**, and that of the Chilian line thus **C**.

*Section No. 2.*—Thirty minutes to the south ; shows similar mountain reliefs. The Argentine line passes by Mount Tumiza, 5670 metres (18,602 feet), in the Cordillera de los Andes, and the Chilian by Mount Rangel, in the Cordillera



Real de Bolivia, while the definitive boundary, which is a straight line, from the intersection of parallel 23° S. lat. with meridian 67° W. of Greenwich to the summit of Mount Rincón, 5450 metres (17,881 feet), crosses between Mounts Chamaca and Pircas in the high desert plateau.

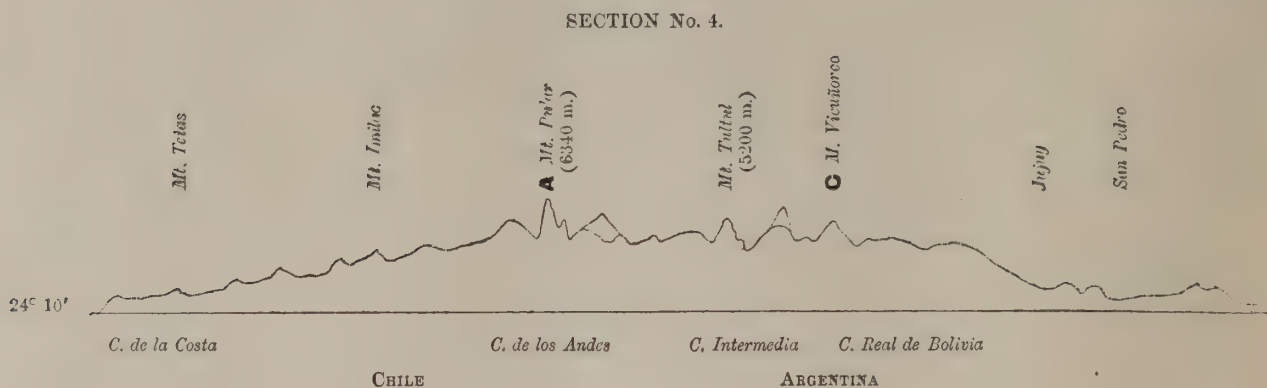
*Section No. 3.*—Along parallel 24° S. lat. ; contains the same general features. The Argentine line which passed by the summit of Mount Capur, 5260 metres (17,258 feet), in the summit of the Cordillera de los Andes, left in Chile the western slope of said Cordillera, while the political line of the Chilian Expert, or



the geographical one of the Chilian Delegates, passed by Mount Tuclí, 5300 metres (17,389 feet), in the summit of the southern prolongation of the Cordillera Real de Bolivia. The line finally settled is intermediate between the two points, at Mount Rincón, 5450 metres (17,881 feet).

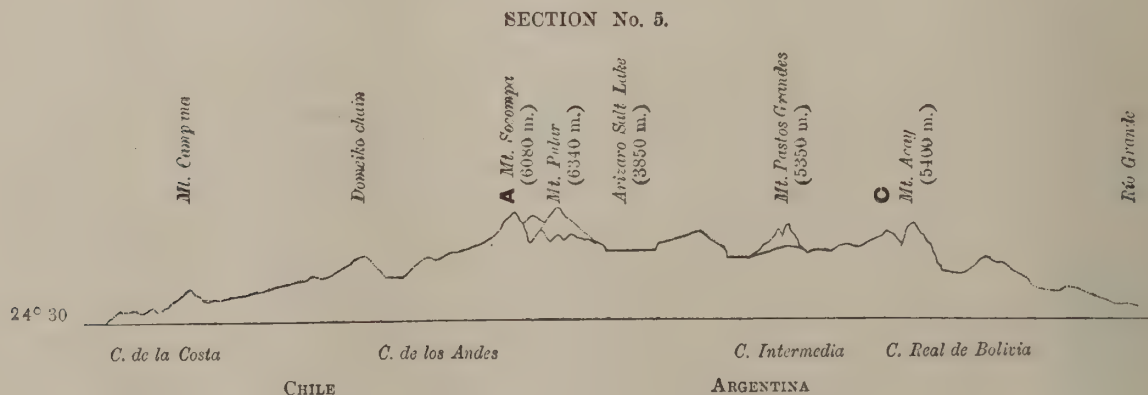


*Section No. 4.*—Ten minutes to the south of the preceding one ; shows the transversal profile where rises Mount Pular, 6340 metres (20,800 feet), in the summit of the Cordillera (No. 23 of the Argentine line) ; the Chilian line follows by Mount Vicuñorco in the Cordillera Real de Bolivia, while the definitive line,



traced between the summit of Mount Rincón, 5450 metres (17,881 feet), and Mount Socompa, 6080 metres (19,948 feet)—which is in the main chain of the Cordillera de los Andes—passes by summits of 5680 metres (18,635 feet), and 5190 metres (17,028 feet) at Agua Delgada.

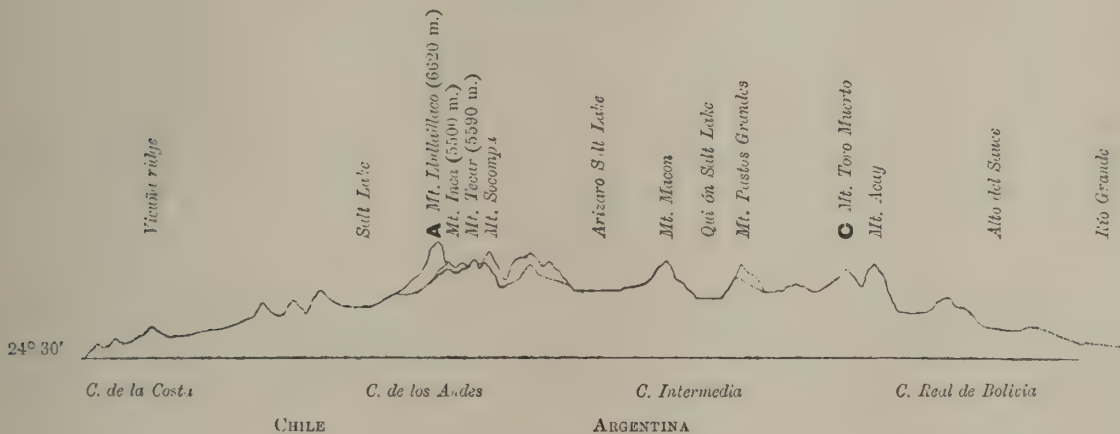
*Section No. 5.*—Represents the relief of the region between Mount Socompa, 6080 metres (19,948 feet), at the summit of the Cordillera, and Mount Acay, 5400 metres (17,717 feet), in the Cordillera Real de Bolivia to the east of the



part of this chain along which the Chilian proposed line runs. The Demarcating Commission who settled the international frontier between 23° and 26° 52' 45" S. lat. determined the boundary, as already said, in a straight line from the

intersection of meridian 67° west of Greenwich with parallel 23° S. lat. to Mount Rincón, and from this summit, in another straight line, to the summit of Mount Socompa (point No. 23 of the Argentine line), coinciding with the summit of the main chain of the Cordillera. This line, which starts from a point considered by the Argentine Expert to be situated to the east of the Cordillera, but which reaches the said Cordillera at Mount Socompa, and passes across a desert and uninhabitable region, is the result of political considerations, but it is not entirely opposed to the requirements of the orographical line of the Treaties. The barren height through which the frontier has been traced, forming a climatic barrier, is efficient as a boundary (owing to its desolate condition), as it is more to the south the true summit of the Cordillera. (See pages 635 and 636 of this Report.)

SECTION No. 6.



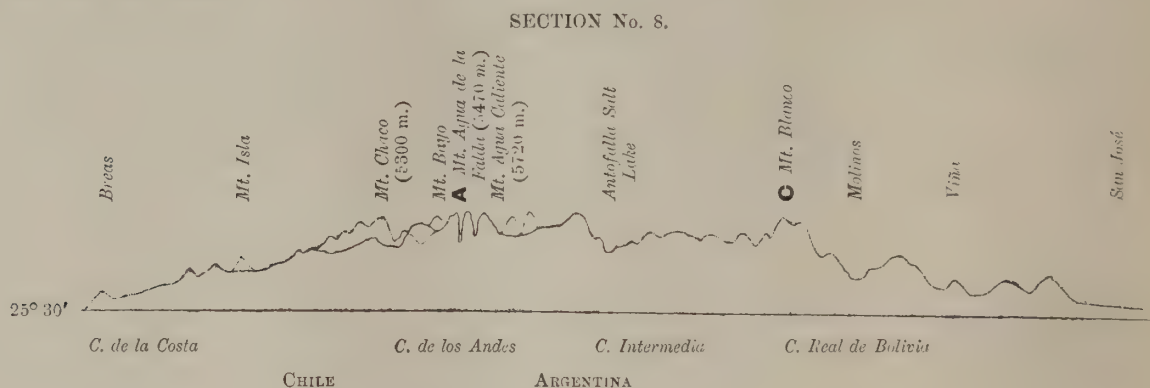
Section No. 6.—Shows the well defined mass of the Cordillera de los Andes, culminating in Mount Lullaillaco, 6620 metres (21,720 feet), where the Argentine line passes, with Mount Inca, 5500 metres (18,045 feet), and Tecar, 5590 metres

SECTION No. 7.

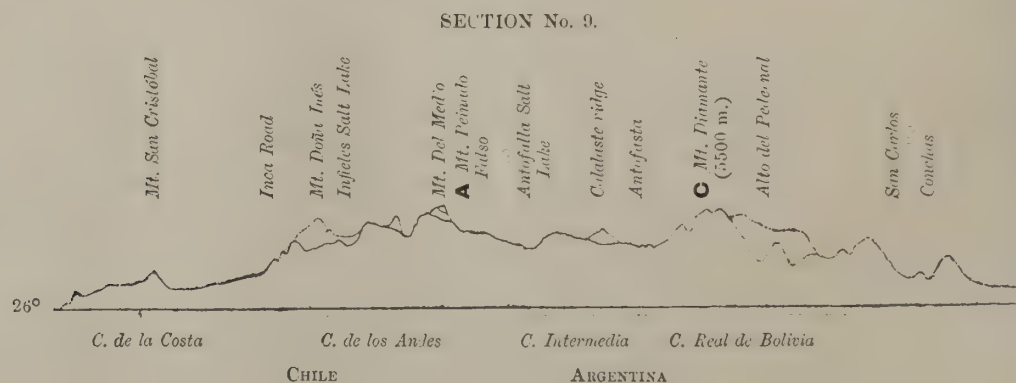


(18,340 feet); the Chilian line runs by Mount Toro Muerto in the Cordillera Real de Bolivia. The Argentine line here coincides with the one established by the Demarcating Commission at Buenos Aires.

*Section No. 7.*—Crosses the Puna de Atacama in that part where the high plateau is bounded to the west by Mount Agua Caliente, 5250 metres (17,225 feet), Mount Azufre, 5680 metres (18,635 feet), Corrida de Cori, and Argentine landmark XLI. in the Cordillera de los Andes, and to the east by Mount Juere Grande, 5655 metres (18,553 feet), the western mountains having been determined as the frontier.



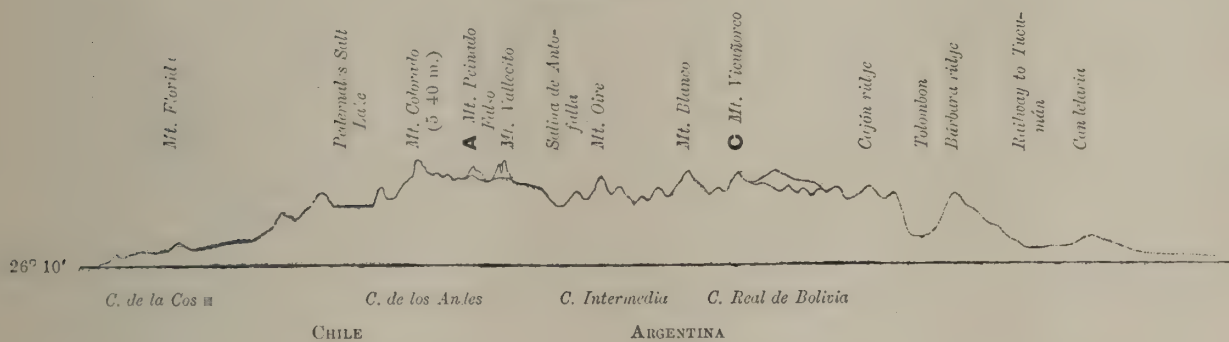
*Section No. 8.*—Shows the Cordillera near Mount Chaco, 5300 metres (17,389 feet), Bayo, 5300 metres (17,389 feet), Agua de la Falda, 5470 metres (17,947 feet), Agua Caliente, 5720 metres (18,767 feet) and Pajonal, the Argentine frontier line passing by Mounts Bayo and Agua de la Falda (Nos. 47 and 49 of the Argentine line); the Cordillera Real de Bolivia is represented by Mount Blanco, selected by the Chilian Expert and Delegates as a point on the frontier, but rejected as such by the Argentine Expert, and by the demarcating Commission.





Section No. 9.—Along the parallel 26° S. lat., continues to show the orographical boundary already settled. The Demarcating Commission traced a straight line between the summit of Mount Agua de la Falda, 5470 metres (17,947 feet) and the summit of Mount Colorado, 5840 metres (19,160 feet), a line which is a little to the east of Mount del Medio (No. 53 of the Argentine line), in the same mountainous mass, while the Chilian line, which was not accepted, passed by Mount Diamante, the culminating point of the Cordillera Real de Bolivia in this latitude.

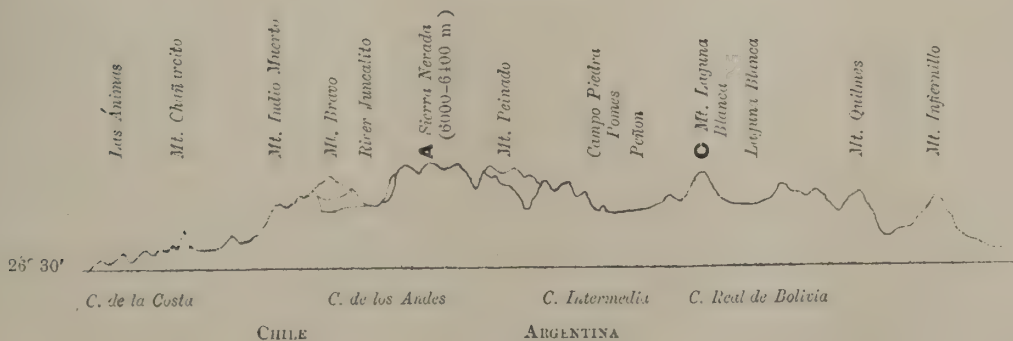
SECTION No. 10.



Section No. 10.—Shows the settled boundary to the west of Mount Vallecito, situated to the east of the line of the Argentine Expert, who proposed a landmark to be planted at Mount Peinado Falso; the Chilian line ran by Mount Vicuñaorco, far to the east.

Section No. 11.—Contains the southern point established by the Demarcating Commission in the Puna de Atacama, at Sierra Nevada. The Argentine line passed very near to the west, by Mount Juncalito, and the Chilian line far to the

SECTION No. 11.

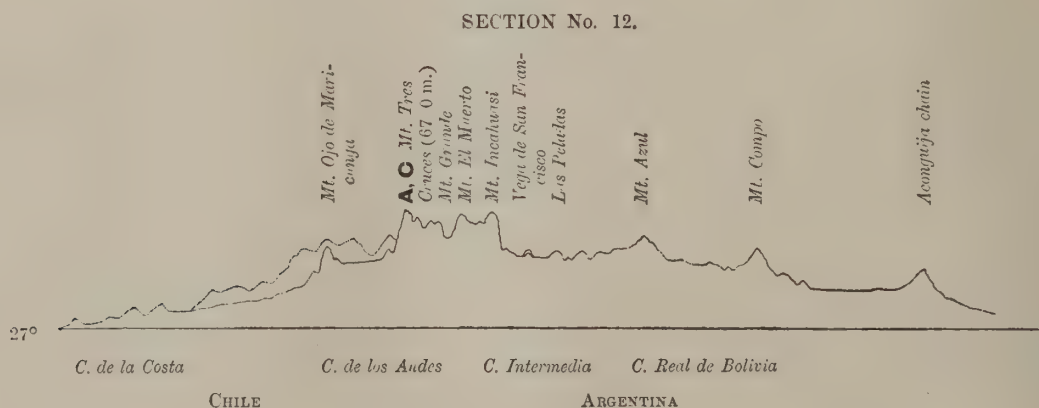


east, by Mount Laguna Blanca in the southern part of the Cordillera Real de Bolivia. The Sierra Nevada was, therefore, considered as belonging to the Cordillera de los Andes, along which the line settled runs from Mount Socompa to the south, and not along the points proposed by the Chilian Expert and the Delegates at Buenos Aires, as they are not within the Cordillera de los Andes.

### 3. THE BOUNDARY FROM MOUNT TRES CRUCES TO 40° S. LAT.

Though from Mount Tres Cruces to Mount Perihueico, the boundary has been definitely accepted, it has been thought advisable to present the sections corresponding to this region, as they will contribute to fix with clearness the general orographical features of the Argentine-Chilian frontier.

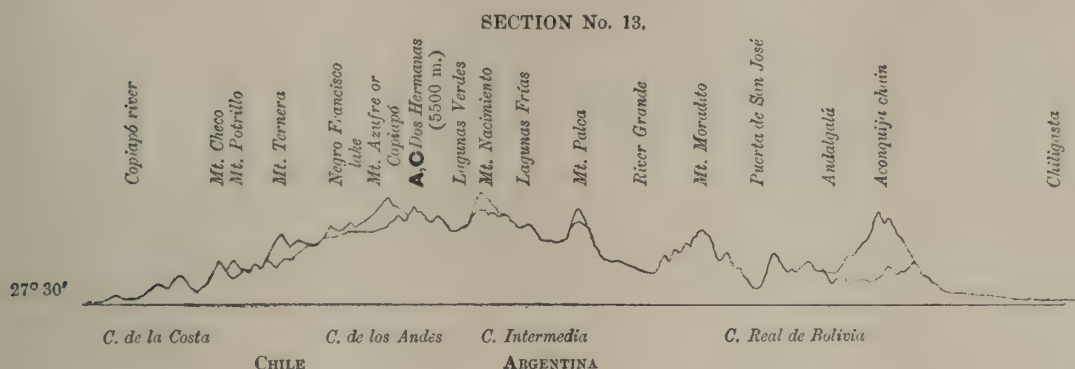
*Section No. 12.*—Contains the first point of the summit of the Cordillera where the lines of the two Experts coincide, i.e. Mount Tres Cruces, 6780 metres (22,245 feet)—No. 3 of the Argentine line, and 10 of the Chilian line. Mount Incahuasi to the east of Mount Tres Cruces and to the south of Mount



San Francisco, is one of the points proposed by the Chilian Expert (No. 4 of the Chilian line). The continuation of the frontier that the Chilian Expert and Delegates indicated between 23° and 26° 52' 45" S. lat. is represented by Mount Azul.

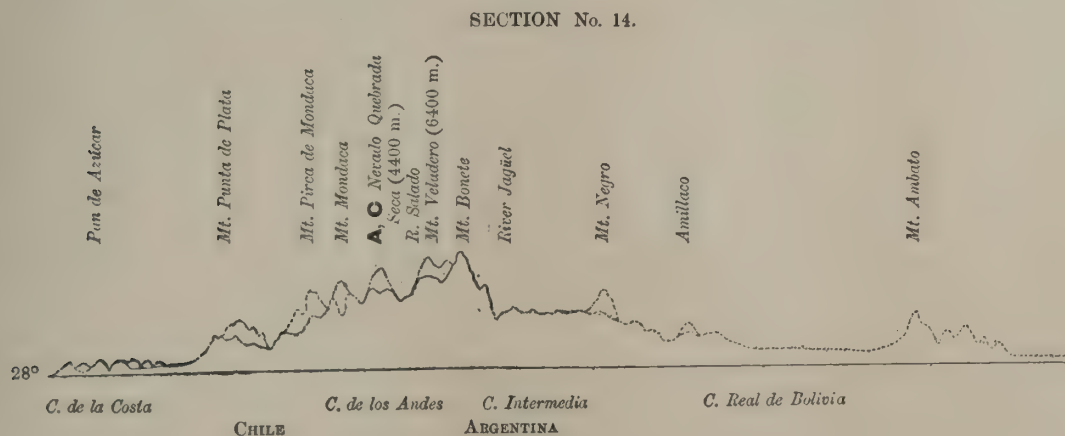
*Section No. 13.*—Comprises the whole mountainous region of Chile and Argentina at 27° 30' S. lat., and contains the Cordillera de la Costa, the Cordillera de los Andes, formed by the two branches culminating in Mount Azufre or Copiapó, 6170 metres (20,243 feet), and Mount Dos Hermanas, 5500 metres and

5260 metres (18,045 feet and 17,258 feet) ; the intermediary chain culminating in Mount Nacimiento, 6680 metres (21,916 feet) ; Mount Moradito, 4350 metres (17,553 feet), representing the Cordillera Real de Bolivia ; and Mount Aconquija in the southern prolongation of the Bolivian chains, to the east of that Cordillera



Real. The boundary line has been agreed upon at Mount Dos Hermanas, as this point lies in the summit of the main chain of the Cordillera de los Andes, where, at the same time, the continental divide is produced.

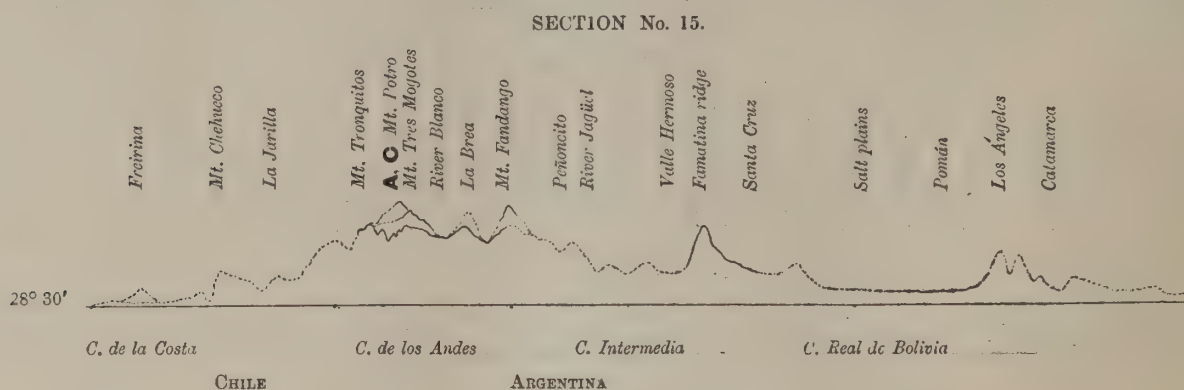
Section No. 14.—Shows the western mountains of the Cordillera and the region to the east, rising more abruptly than in the preceding one, but the Cordillera Real de Bolivia and the eastern chains become gradually lower in



height, the boundary accepted being at Quebrada Seca, 4460 metres (14,632 feet), in the Cordillera de los Andes. Though Mounts Veladero, 6400 metres (20,998 feet), and Bonete are higher, they do not belong to the Cordillera de los Andes, and therefore have been always considered as in Argentine territory.

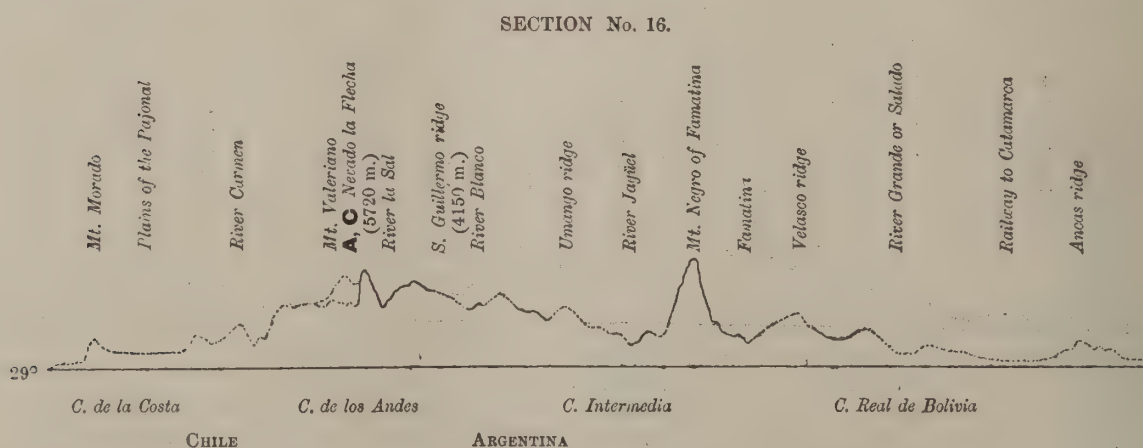


*Section No. 15.*—Shows the mountainous mass formed by the Cordillera de los Andes, where at Mounts Potro and Tres Mogotes, the boundary line definitively accepted by the Experts passes. Mount Fandango, to the east, is in



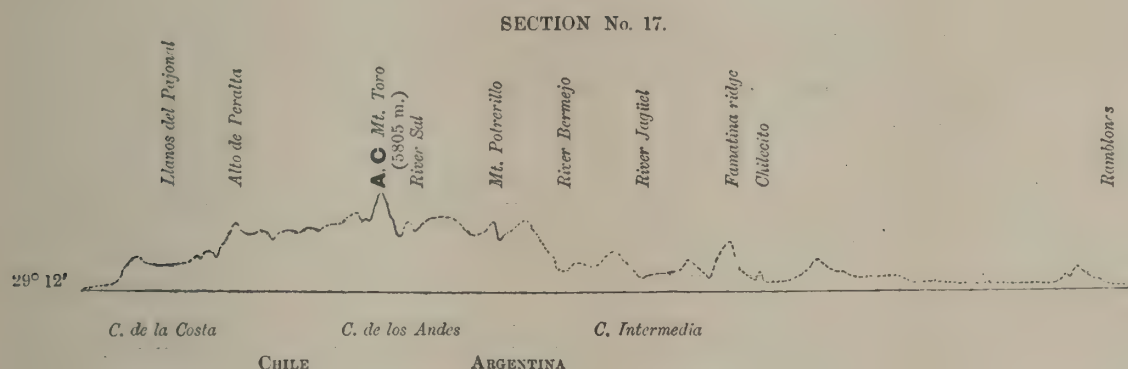
the intermediate chain; the ridge of Famatina forms the continuation of the Cordillera Real de Bolivia, and the Los Ángeles ridge, the continuation of the chain to the east of the latter.

*Section No. 16.*—The Chilean Expert has imagined that according to the Argentine interpretation of the Treaty of 1881, the summit of Mount Famatina, 6130 metres (20,112 feet) could possibly be selected as a point of the boundary. This section shows how capricious is the theory attributed to the Argentine Republic by the Chilean Expert, when saying that said theory consists in select-



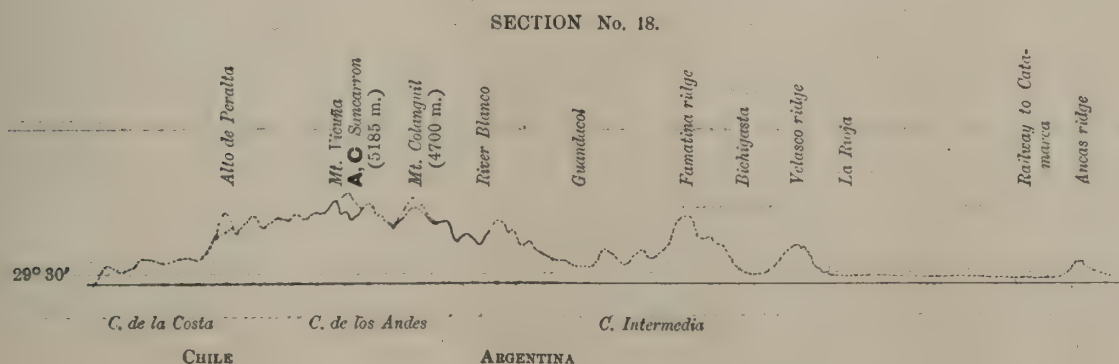
ing, in order to trace the boundary, the highest points scattered in the South American Continent to the south of parallel 23° S. lat. In fact the Argentine Republic thinks that the Cordillera de los Andes cannot be abandoned; and Mount

Famatina is outside it, in the prolongation of the Cordillera Real de Bolivia, at the centre of the Argentine territory, and has always been considered as one of its most valuable mineral regions. The Cordillera de los Andes is represented in this section by Mount Valeriano, Mount La Flecha, 5720 metres (18,766 feet), where passes the boundary agreed upon, and by the San Guillermo ridge, 4150 metres (13,617 feet), which in that latitude forms the eastern chain of the Cordillera, which has been held, from the time of the Spanish Conquest, as rising in territory under the control of the authorities of the Río de la Plata, and afterwards under the Argentine rule.



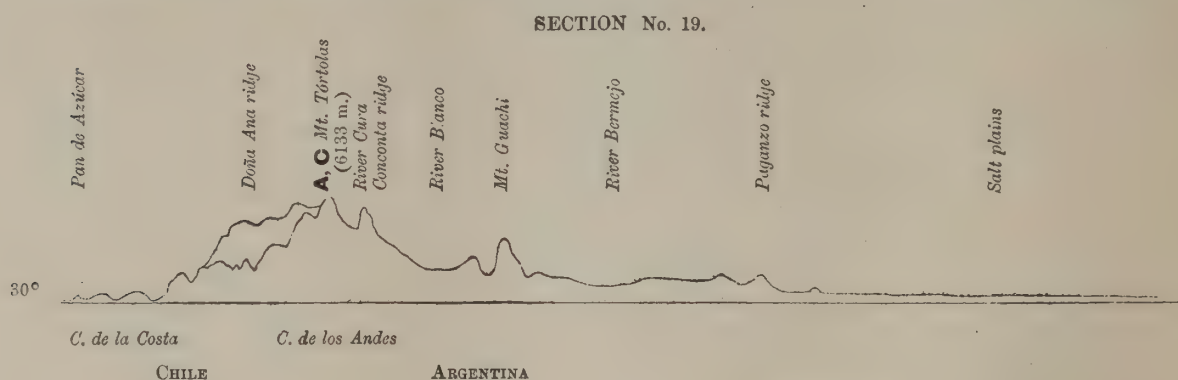
*Section No. 17.*—No difficulties have in the past been raised concerning the boundary between Argentina and Chile in this region, nor in many others to the north and south has occasion ever arisen to settle it definitely, and consequently these mountains have not been thoroughly surveyed, but the section shows the point agreed upon by which the frontier line is to pass in Mount Toro, 5805 metres (19,045 feet), at the summit of the Cordillera.

*Section No. 18.*—Mount Vicuña, 4625 metres (15,175 feet), and to the



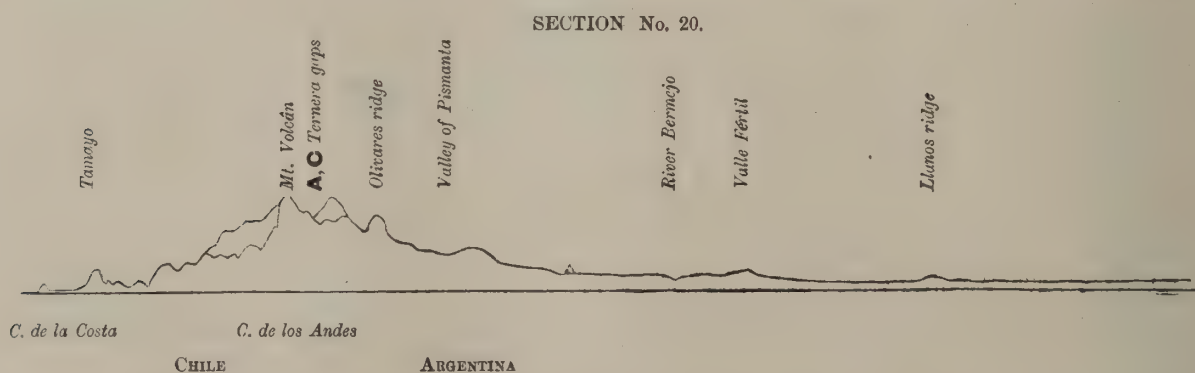
north, Mount Sancarron, 5185 metres (17,011 feet), are in the boundary line at the western branch of the Cordillera, forming the main chain, while Mount Colanguil, 4700 metres (15,421 feet), is situated in the eastern chain. To the east the mountains diminish in height, and form ridges relatively low.

*Section No. 19.*—Represents the high mass of the Cordillera at 30° S. lat. culminating in Mount Tórtolas, 6133 metres (20,121 feet), by which the frontier line passes. Here the features, which, according to the Argentine Expert, fulfil



the conditions of the Treaties of 1881 and 1893 to form the boundary, and the Continental divide, which is the boundary according to the Chilian Expert, coincide. There are no important ridges of the intermediate chain of the Cordillera Real de Bolivia to the east.

*Section No. 20.*—The same can be said in this case, but the boundary line agreed upon does not pass at the highest point, as the waters of the main

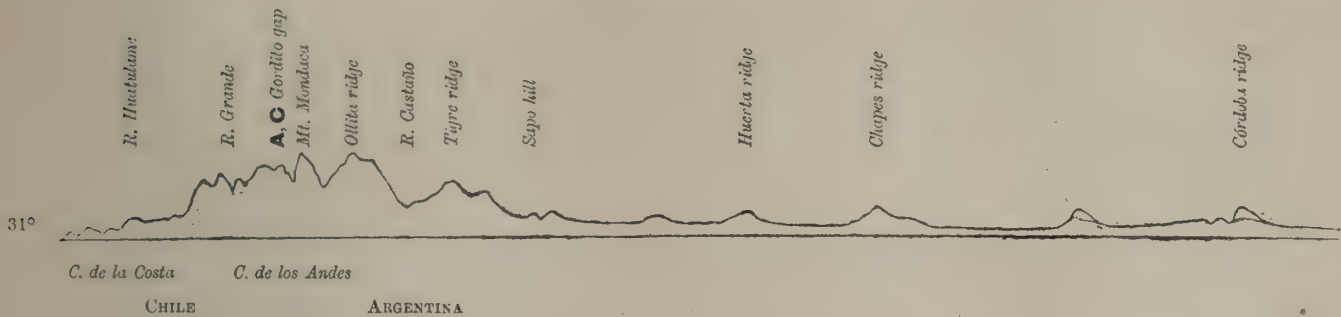


chain flow down from the east of the summit of Mount Volcán, 5530 metres (18,143 feet), in the western chain of the Cordillera, the traditional boundary chain.



*Section No. 21.*—The line agreed upon runs to the west of Mount Mondaca, in the main chain of the Cordillera, which is well separated from the eastern chain by the valley of the river Atutia. This section comprises the Sierra de Córdoba ridges, at 330 miles to the east of the Cordillera, but which, according to Chilian geographers' theories, might be held as corresponding with the system

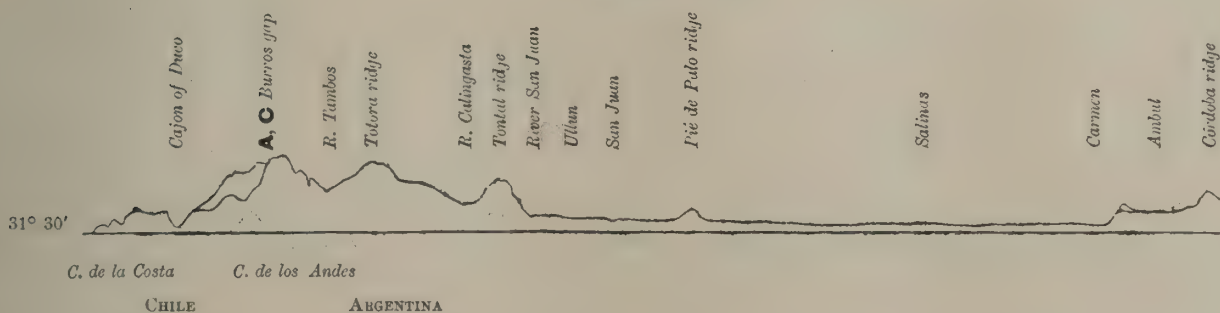
SECTION No. 21.



of the Andes. According to them, in the interval between these ridges and the Cordillera, the boundary line should be located where the continental divide would be produced. Happily the interoceanic water-parting here coincides with the mass of the main chain of the Cordillera, and at Goroto Gap the line has been agreed upon by both Experts without any difficulty.

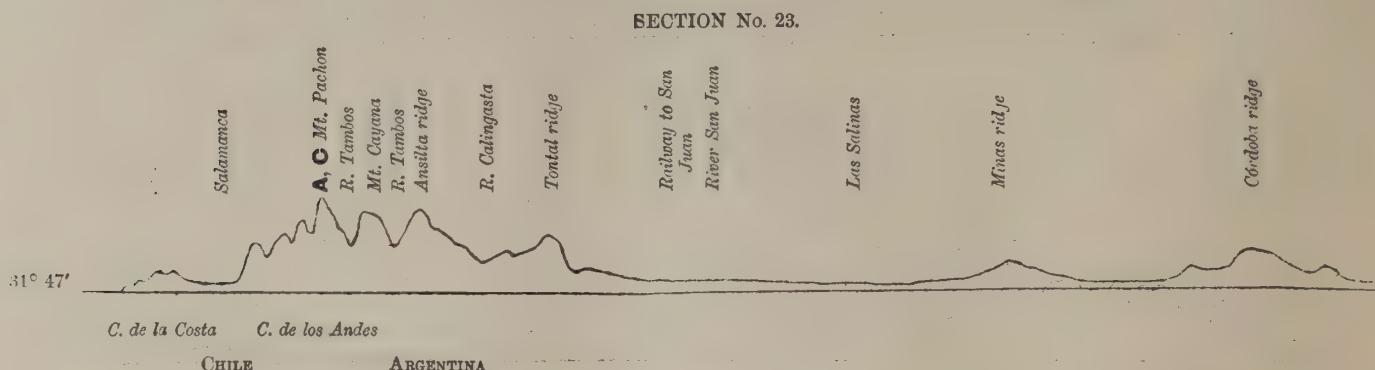
*Section No. 22.*—Shows the two chains of the Cordillera de los Andes, well separated by the valley of Tambos, having to the west the Cordillera de la

SECTION No. 22.



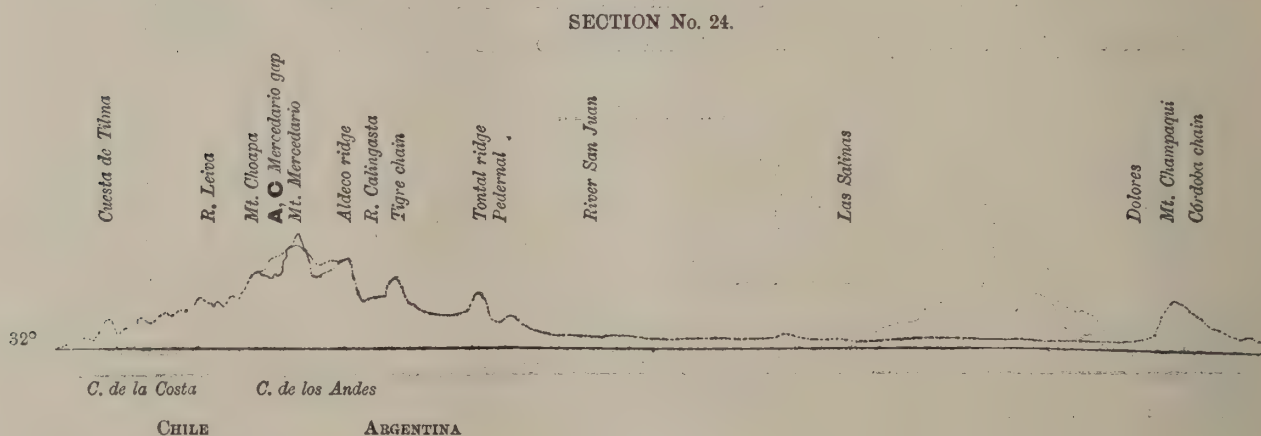
Costa, in Chile, and to the east the Pre-Cordillera represented by the Tontal ridge, and in the distance, in this same direction, the Córdoba ridges. The boundary line agreed upon passes by the western chain, in the gap of Burros.

*Section No. 23.*—The western chain of the Cordillera is divided into two ridges, the boundary passing by the crest of the western or main one. The central valley of Chile is represented by the depression of Salamanca; the valley



of Calingasta separates the Pre-Cordillera from the Cordillera; Sierra Minas belongs to the southern part of the Cordillera Real de Bolivia; Sierra de Córdoba corresponds to the ridge of the eastern Bolivian chain; and the low plains to the east continue as far as the Brazilian mountains.

*Section No. 24.*—Contains the Cordillera de los Andes, culminating at Mount Mercedario, 6834 metres (22,422 feet). The central valley of Chile is not well

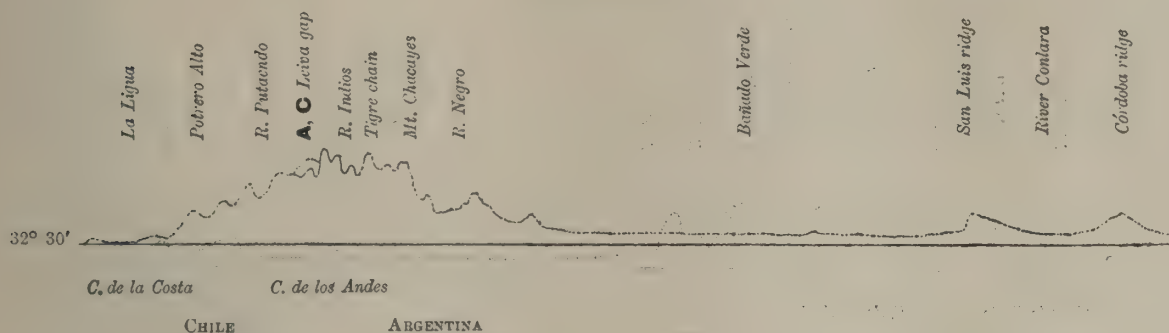


defined, but this is not the case with regard to the eastern parallel valley, which separates the Cordillera from the Pre-Cordillera. The boundary agreed upon runs to the east of Mount Mercedario along the main chain.

*Section No. 25.*—The ridge forming the true chain of the Cordillera is not

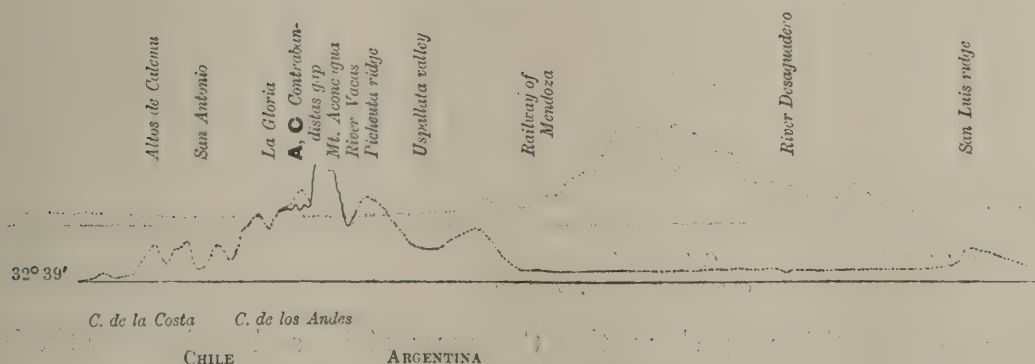
very clear and defined, but the boundary agreed upon passes at the centre of the mountainous mass.

SECTION No. 25.



*Section No. 26.*—Shows Mount Aconcagua as rising between the eastern and western chain of the Cordillera, which is flanked to the west by the Cordillera de la Costa, separated from the former by the valley of San Antonio; and to

SECTION No. 26.

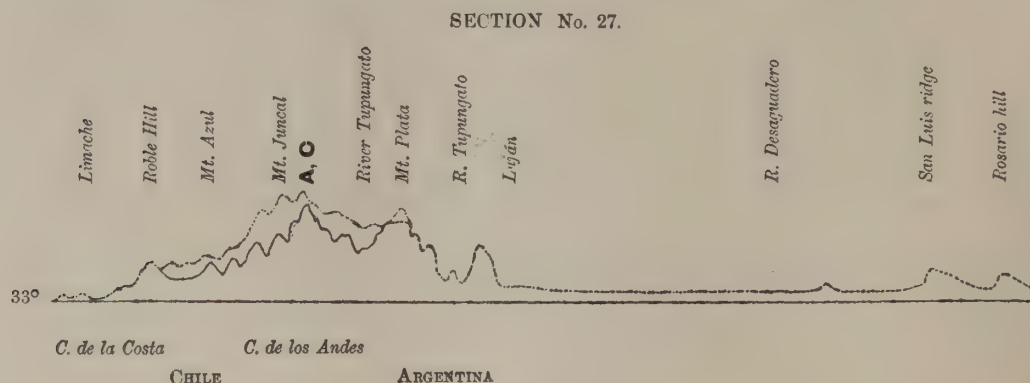


the east by the Pre-Cordillera, separated from the Cordillera by the valley of Uspallata. The traditional boundary line passing along the main chain at the eastern foot of the Andean Giant, at Contrabandistas Gap, is represented on Plate VI.

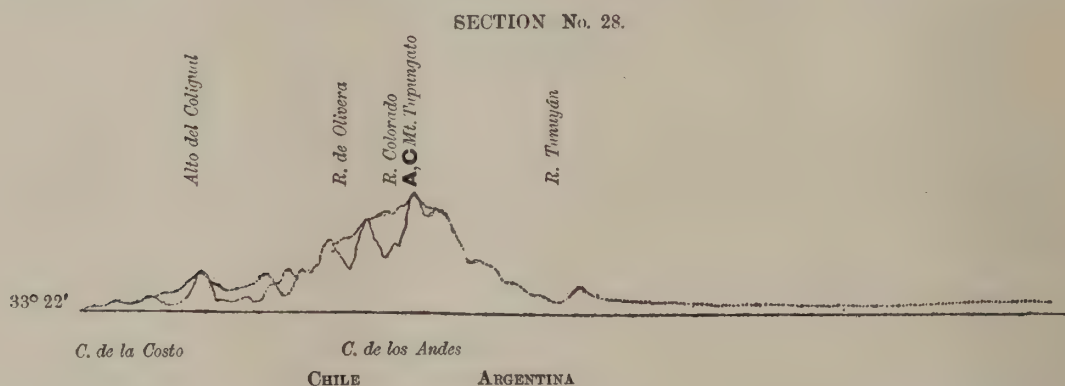
*Section No. 27.*—Shows the neighbourhood of the traditional pass, called Cumbre de Uspallata, between the western and the eastern regions of that part of South America where the imposing orographical features of the Cordillera have formed the boundary definitely accepted by Argentina and Chile. The two chains of the Spanish Cordillera Nevada, or Cordillera de los Andes, are



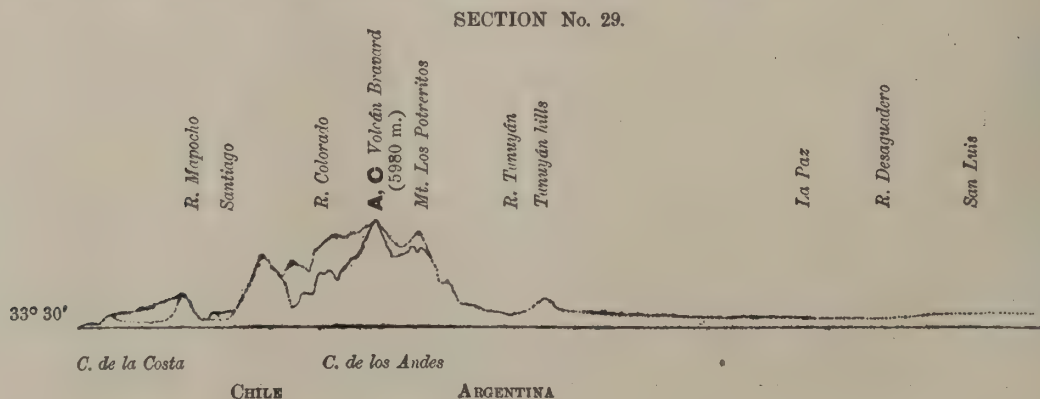
well defined, and the watershed of the Cordillera runs at a general altitude of 3800 to 4500 metres (12,468 to 14,764 feet) above the sea.



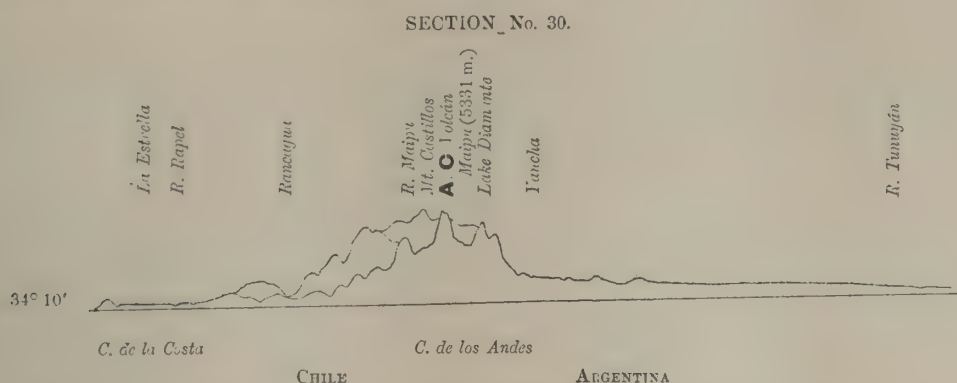
Section No. 28.—Contains the Cordillera de los Andes culminating at Mount Tupungato, 6830 metres (22,408 feet); as that high summit combines the conditions stipulated in the boundary Treaties, the line agreed upon passes by it.



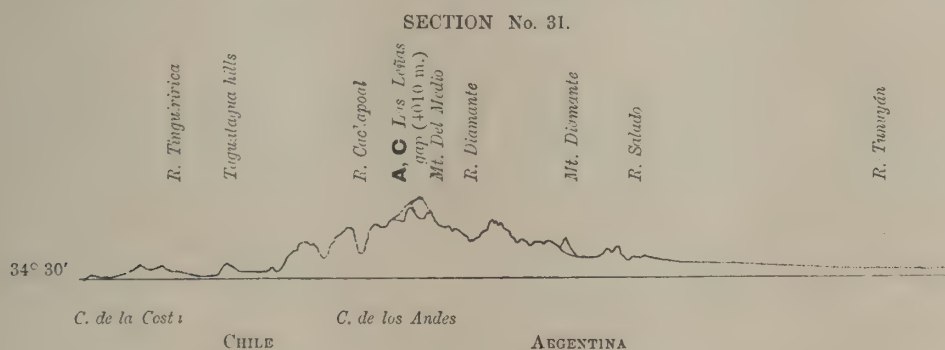
The Plate on the title-page shows that that mass of ice and rock forms the best natural boundary between two nations that could be desired.



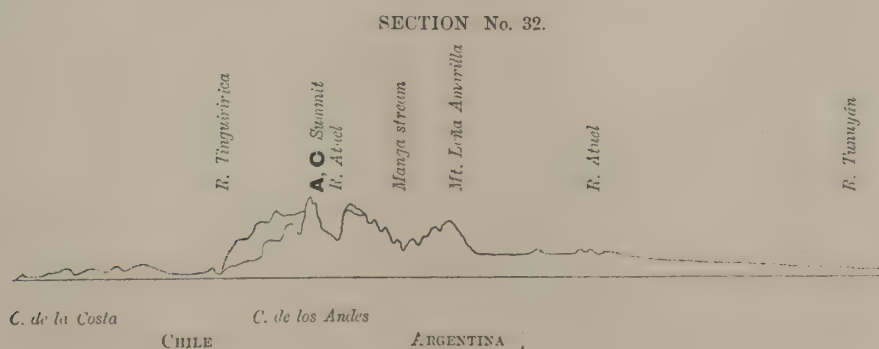
Section No. 29.—The same may be said of this section, where the line agreed upon passes across Mount Bravard, 5980 metres (19,619 feet), which is here the culminating peak of the Cordillera de los Andes.



Section No. 30.—The Volcano Maipo is another gigantic landmark at the top of the Cordillera, rising 5331 metres (17,490 feet) above the sea.

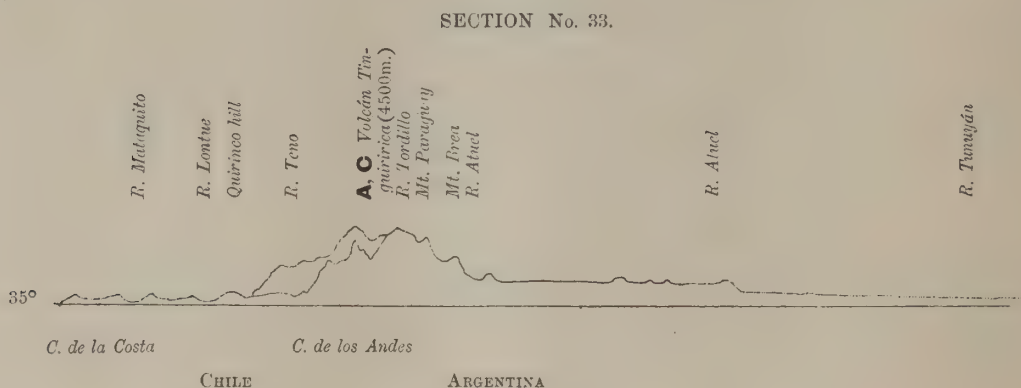


Section No. 31.—Shows Las Leñas Gap, 4010 metres (13,156 feet). It is situated in the summit of the main chain, there clearly separated from the eastern chain of the Cordillera by the valley of the river Diamante.

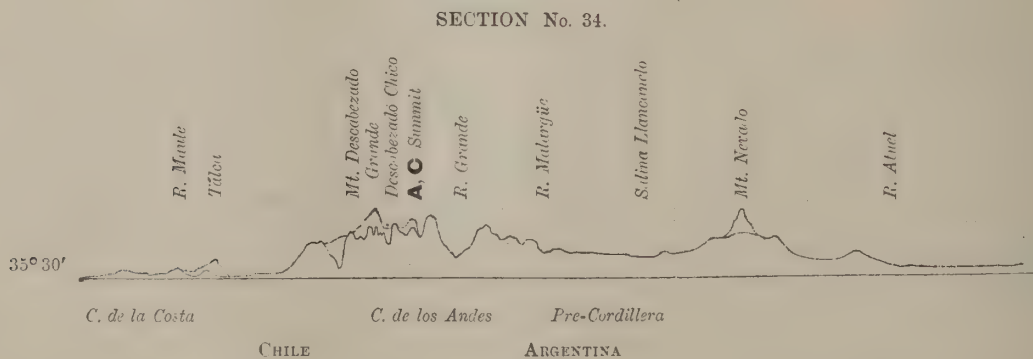


*Section No. 32.*—Shows the Cordillera more broken. In the longitudinal direction the main chain, where the boundary-line has been agreed upon, is well defined. Very modern volcanic action has modified the primitive orography of the chain in this section.

*Section No. 33.*—Volcano Tinguiririca is another natural landmark agreed upon at the summit of the main chain of the Cordillera, 4500 metres (14,765 feet).



*Section No. 34.*—Shows the boundary accepted to the east of the high peaks, running across the Cordillera, which is there very broken and eroded. To the east is seen Mount Nevado; mentioned in the statement read by the Chilean

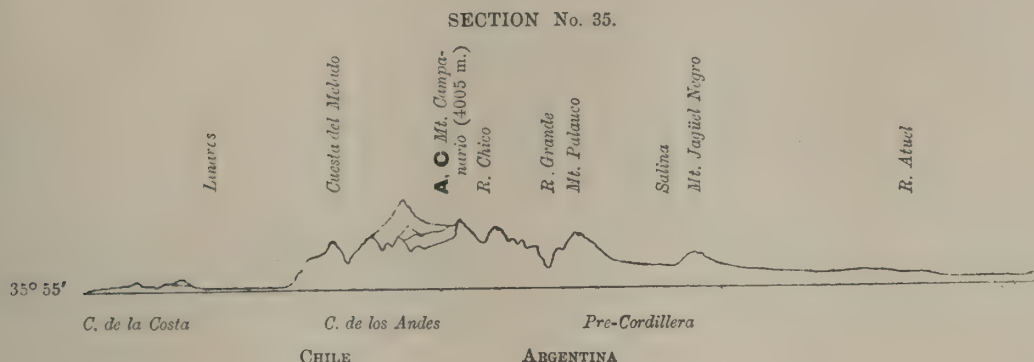


Representative as a mountain of the Cordillera de los Andes, within the main chain of which the boundary line must be located. The section proves how erroneous is that assertion. Mount Nevado belongs neither to the Cordillera de los Andes nor to the Pre-Cordillera, being far to the east of the latter.

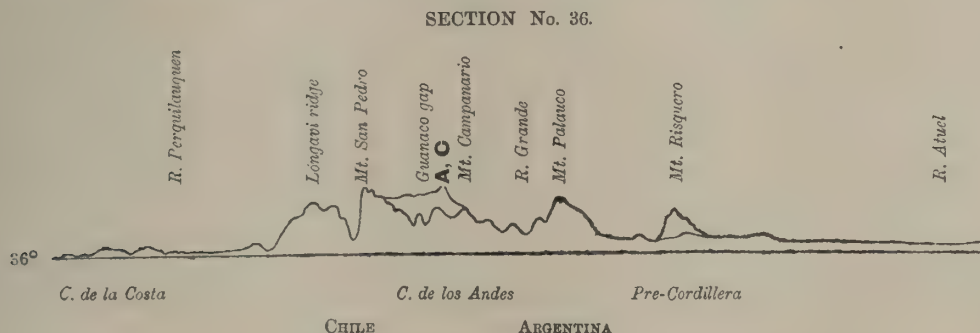
*Section No. 35.*—Contains the boundary agreed upon, running close to the east of the high mountainous mass, as in Mount Campanario, 4005 metres (13,140



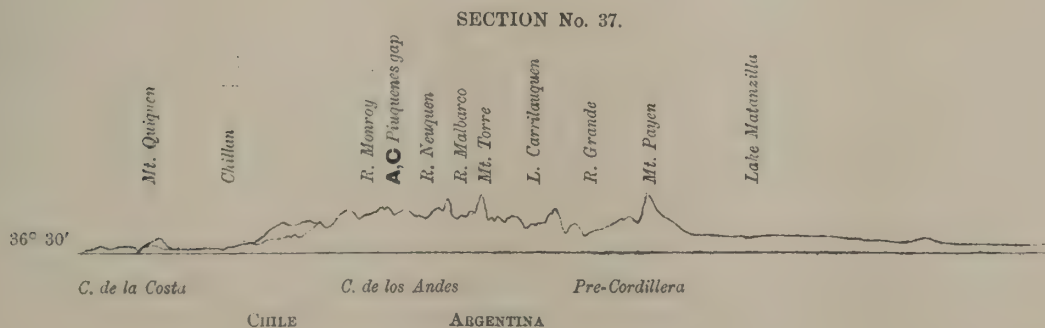
feet), and fulfilling the requirements stipulated in the Treaties, as it passes along the watershed of the main chain of the Cordillera.



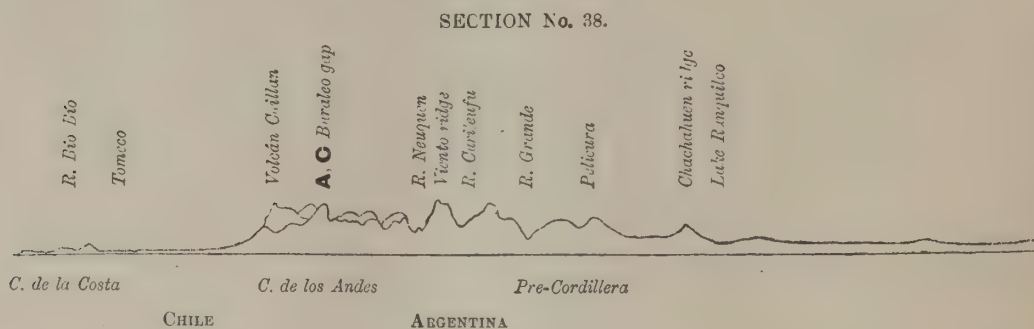
*Section No. 36.*—The same thing can be said of this section, where the boundary line runs from north to south along the same ridge of Mount Campanario. Mount Risquero belongs to the same system as Mount Nevado, and cannot be considered as situated in the Cordillera de los Andes.



*Section No. 37.*—The Cordillera de los Andes in lat. 36° S. is less broken up, and the boundary line agreed upon runs here along the watershed of the

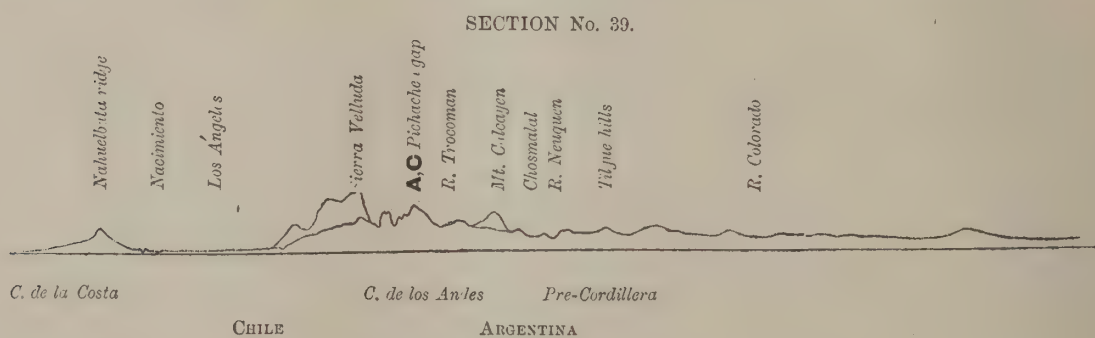


main chain. The isolated volcano of Payen, represented to the east, corresponds to the same system as Mounts Nevado and Risquero, and is therefore outside and to the east of the Cordillera.



*Section No. 38.*—Contains the Cordillera spreading out into different ridges, but the main chain is always well-defined, and in it the boundary agreed upon passes along its watershed, in the principal mass.

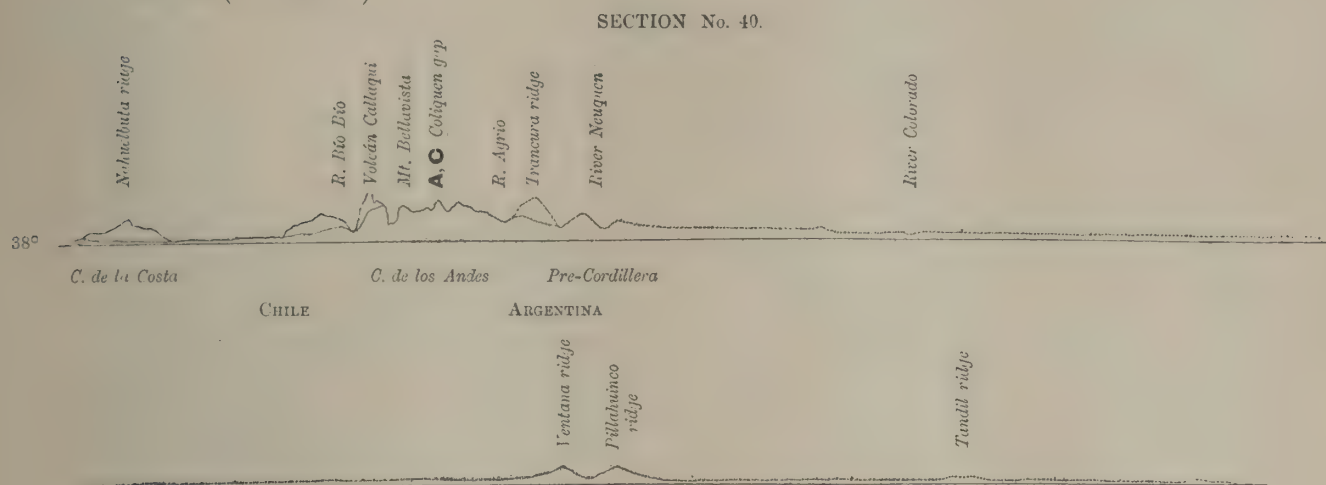
*Section No. 39.*—Represents in the volcanic mass of Sierra Velludo very different features, as regards the boundary, to those shown in Section No. 26,



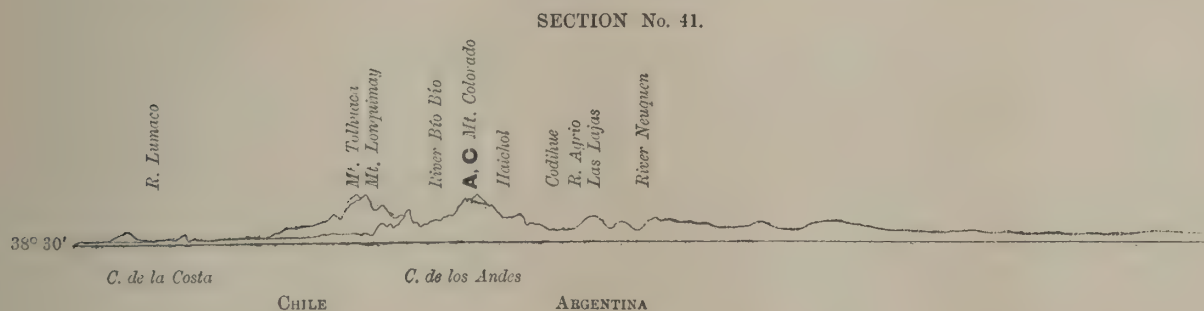
where Mount Aconcagua is to the east of the watershed of the main chain ; but here, as in the former, the mass of the Andean range constitutes the very best frontier.

*Section No. 40.*—The Chilean Representative imagines that the boundary line of the Treaties of 1881 and 1893 must be traced along the continental divide in the Andean system. This section, along the parallel  $38^{\circ}$  S. lat., is the best proof of the error involved by such an interpretation of those Treaties. In the way of reasoning of the Chilean geographers, all the mountains contained in it might be considered as forming part of the Andean system, and between the summit of the Cordillera and the Sierra del Tandil there are twelve degrees

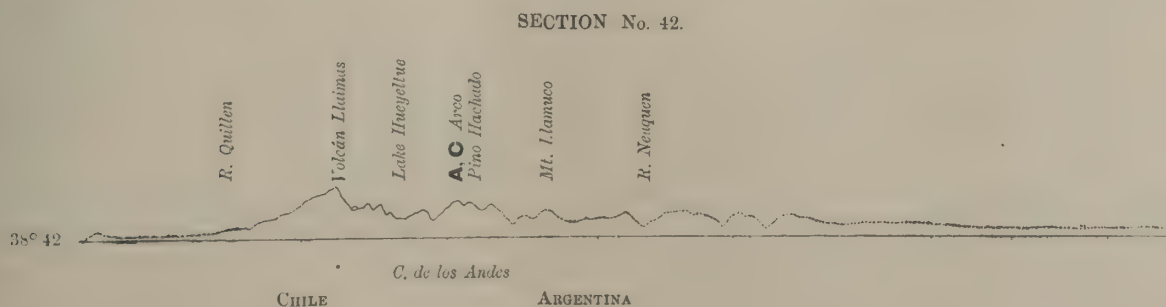
of longitude of flat plain. The boundary must be in the Cordillera de los Andes, in its main chain, and in fact it has been agreed at Coliquen Gap, 1810 metres (5938 feet).



Section No. 41.—Shows a transversal section of the bifurcation of the Cordillera. Mounts Tolhuaca and Lonquimay representing the main chain, and



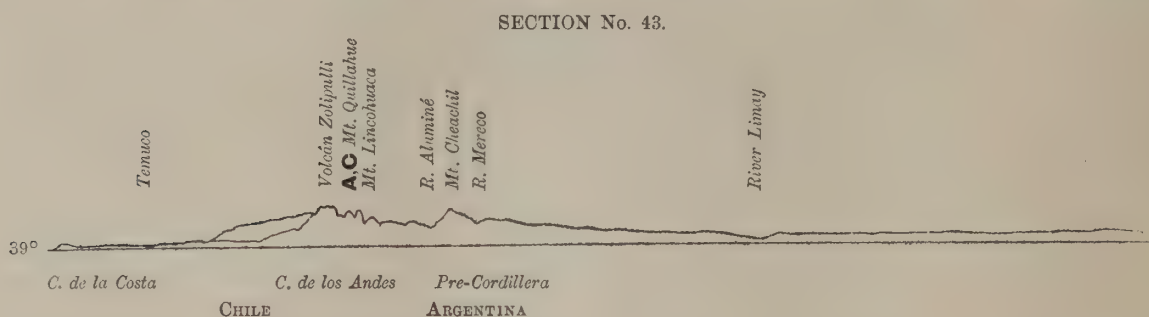
Mount Colorado the eastern branch, in which, as it is situated in the Cordillera, the boundary line has been traced, as explained in the preceding chapters.



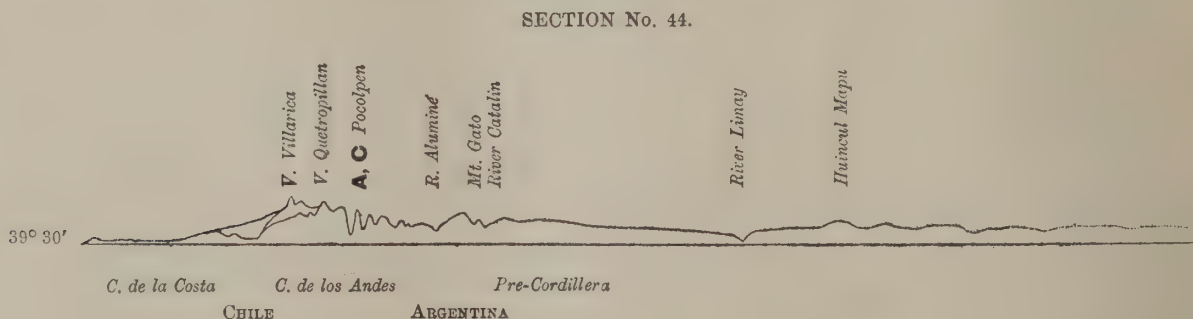


*Section No. 42.*—Represents similar features to that of the preceding one, and shows the Bío Bío Valley, which has always been considered as Chilean territory.

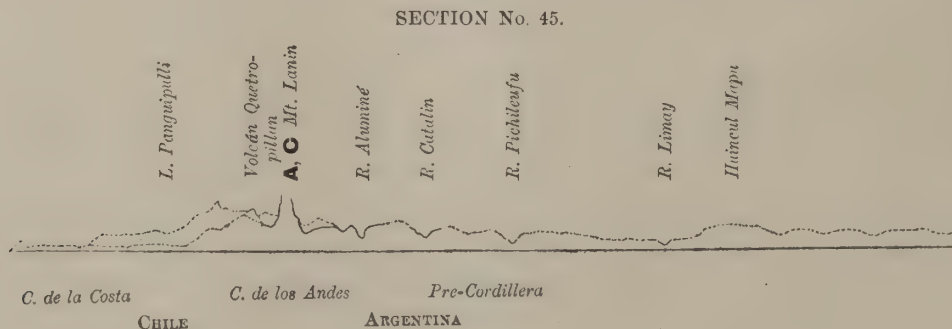
*Section No. 43.*—The branch resulting from the bifurcation of the Cordillera de los Andes having disappeared, and the main chain fulfilling the conditions



necessary for the boundary line, the latter has been agreed upon at Mount Quillahué, in 39° S. lat. ; the longitudinal valley through which the river Aluminé runs is parallel, to the east of the Cordillera, to the central valley of Chile.

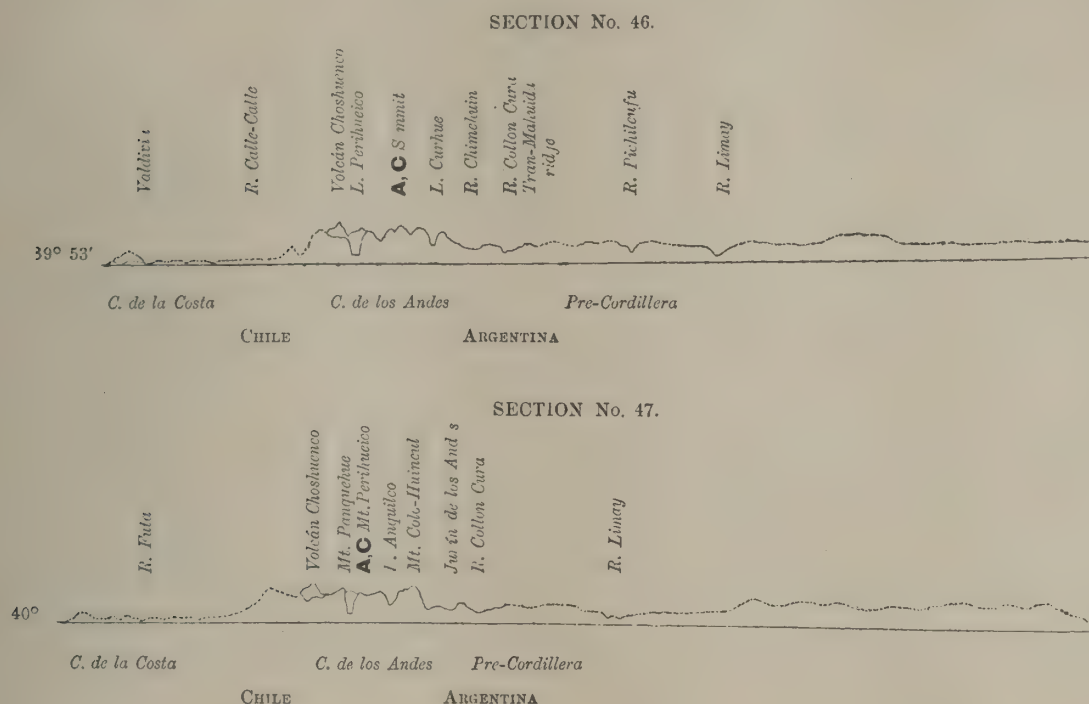


*Section No. 44.*—While there are higher mountains to the west, as Mounts Villarica and Quetropillan, they are situated outside the main chain of the Cordillera de los Andes, where the boundary line must be located.



*Section No. 45.*—The Volcano Lanin is another natural majestic landmark accepted by the Experts, and the section is so impressive that it does not need any description.

*Sections Nos. 46 and 47.*—Show the last points where the boundary line proposed by the Argentine Expert and that proposed by the Chilian Expert are in agreement in the Cordillera de los Andes from 27° to 40° S. lat. In that



extent the watershed of the main chain in its summit coincides with the continental divide, which according to the Chilian Expert, is consistent with the Treaties, though they only mention the Cordillera de los Andes, the main chain, and the watershed of the line of high summits, synonymous with the main or central chain.

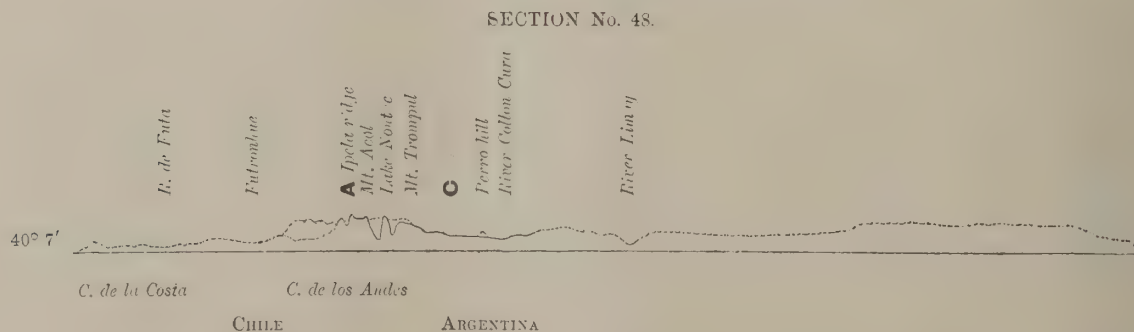
#### 4. THE BOUNDARY FROM 40° S. LAT. TO 52° S. LAT.

From Mount Perihueico the Chilian line runs to the east and the Argentine to the south.

Chile, according to her historians, geographers and statesmen, is formed by the western slope of the Cordillera, the central valley of Chile, and the region

of the Cordillera de la Costa, stretching as far as the Pacific Ocean. Argentina is formed by the eastern slope of the Cordillera, by the valleys between the Cordillera and the Pre-Cordillera, and by all the plains and mountains extending to the east towards the Atlantic Ocean; the summit of the Cordillera, i.e. the crest of the main chain, constitutes the boundary in the line of intersection between the two slopes. This fact cannot be disputed; the internal laws of both nations have recognised it before and after the Treaties, as has been demonstrated in this Evidence; and Sections Nos. 1 to 47 show that the two countries cannot have a better frontier on account of the respective situation in the South American continent. That natural frontier is indispensable for their normal development, and this is so manifest that when some writers have attempted to leave that limit in search of an illogical one, encroaching on the Argentine territory, they have always been contradicted, as already stated, by their own words. It is sufficient to point out that the Chilian Expert, when locating the eastern frontier of his country in the place shown in the next cut, and in many of those which will follow, is in open contradiction with the truth he has so often repeated, that Chile extends from the western slope of the Andes to the Pacific Ocean.

*Section No. 48.*—To the south of 40° S. lat. the Cordillera de los Andes commences to be intersected by waterways throughout its length, and the Chilian Expert, forgetting what had been agreed to in the Treaties as to the location of the boundary on the summit of the Andes, as well as the elementary

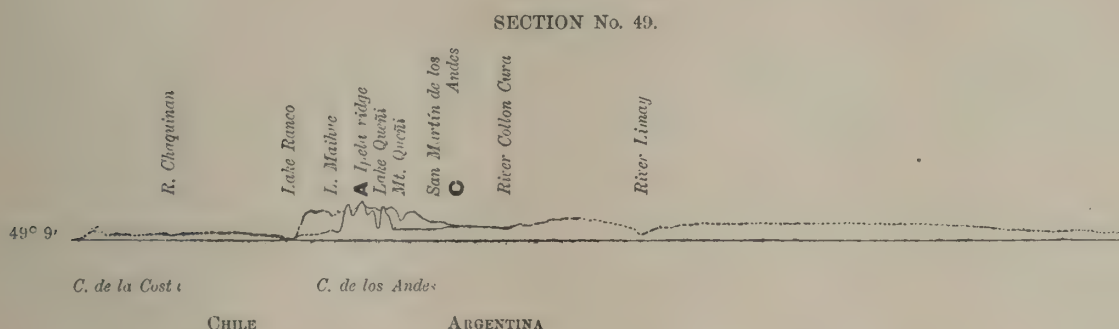


principles of physical geography, has drawn his line away from the crest of that range, and from the range itself, as shown in this section, trying to extend the Chilian territory towards the east, and to leave within it all the Cordillera de los Andes, under the pretence that the South American continental divide must be considered as constituting the summit of that Cordillera. The section

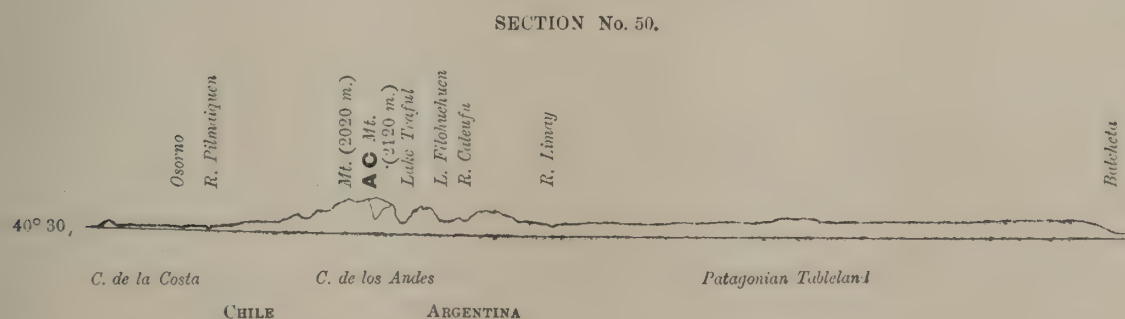


shows that the whole range is to the west of that divide, as it has been recognised even by the Chilian geographers. Perro Hill is not in the Andes.

*Section No. 49.*—Is still more striking in regard to the Chilian Expert's pretensions. In the course of this Evidence it has been ascertained that the Cordillera de los Andes rises to the west of Lake Lacar, which has also been affirmed by the Chilian geographers, and that the lake, though comprised in the same lacustrine basin of rivers tributary to the Atlantic, using the words



of Dr. Steffen, abnormally flows to the Pacific; the divide, where the Chilian Expert has proposed to locate the boundary line, occurs to the east of it. The section shows the orographical boundary of the Treaties as the Argentine Expert has proposed it, and the hydrographical one proposed by the Chilian Expert, encroaching on Argentine territory, where important settlements exist under Argentine control which has never been contested by Chile.



*Section No. 50.*—The boundary line agreed upon by the two Experts runs along the summit of the Cordillera de los Andes.

*Section No. 51.*—In this section, as in the preceding, the longitudinal eastern depression which separates the Cordillera de los Andes from the Pre-Cordillera

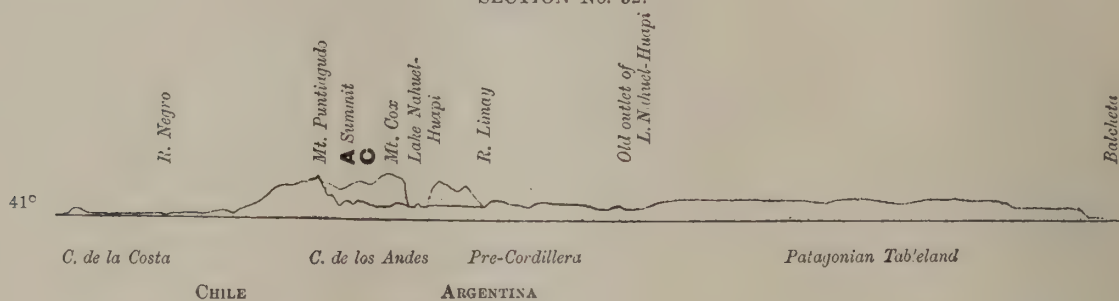
is occupied by the northern arm of Lake Nahuel-Huapi. The boundary line agreed upon passes by a point which always has been recognised as the frontier, the Perez Rosales Gap.

SECTION No. 51.



*Section No. 52.*—Shows the boundary line proposed by the Chilean Expert in the continental divide, to the east of the Argentine line, which passes by the summit of Mount Tronador. It is true that the point selected by Señor Barros Arana lies in the Cordillera de los Andes, but it is also true that it is not in the

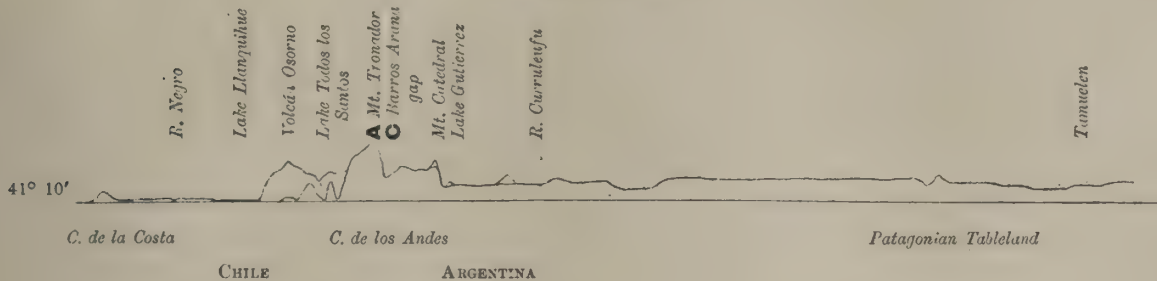
SECTION No. 52.



main chain, where the general watershed of the range occurs, a fact which has been taken into account by the Argentine Expert, and which has led to his refusal to accept the boundary proposed by his colleague, as it passes by a secondary watershed, normally corresponding to Nahuel-Huapi, at the eastern slope of the Andes and therefore in Argentine territory.

*Section No. 53.*—The continental divide does not correspond with the summit of the Andes. It occurs in the longitudinal depression to the east of the main chain of the Cordillera. In its summit at the snowy ridge to the south of Mount Tronador the Argentine Expert has located the boundary, while the Chilean Expert has carried his line outside that main chain, thus commencing another deviation towards the east of the eastern foot-hills of the range.

SECTION No. 53.



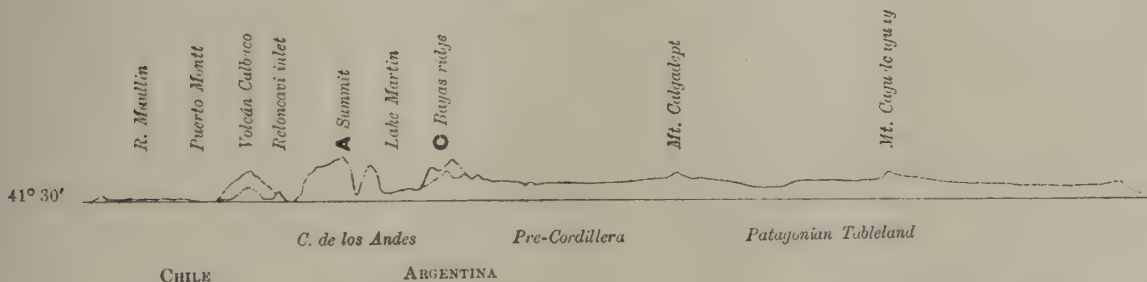
Section No. 54.—The Chilian Expert, to the south of 40° S. lat., has abandoned the summit of the Cordillera, and has proposed his line at the eastern foot of the range, reverting to the main chain when the continental divide

SECTION No. 54.



coincides with it; but at the neighbourhood of 41° 30' he has chosen the summit of the Pre-Cordillera, which has nothing to do with the frontier agreed to in 1881 and 1893. The Argentine Expert, on the contrary, has continued to the south his logical line along the snowy mass of the Cordillera.

SECTION No. 55.

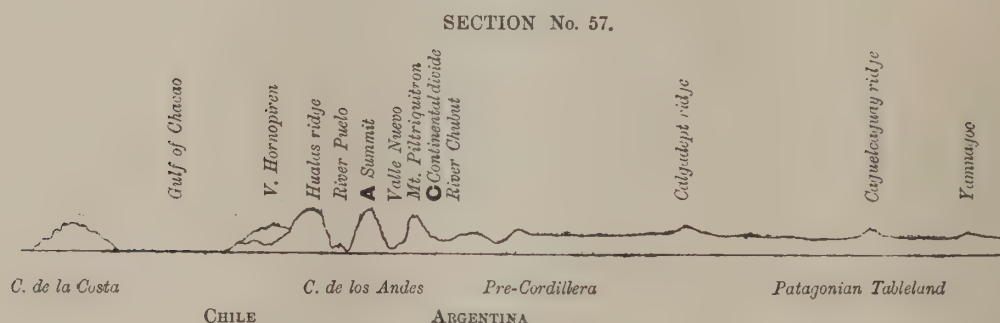
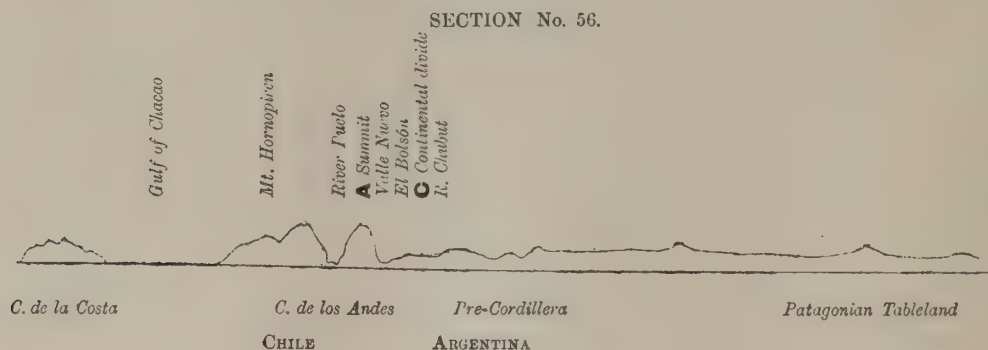


Section No. 55.—Shows similar facts. The Chilian line runs outside the Cordillera de los Andes in the Pre-Cordillera ridges to the east of the wide



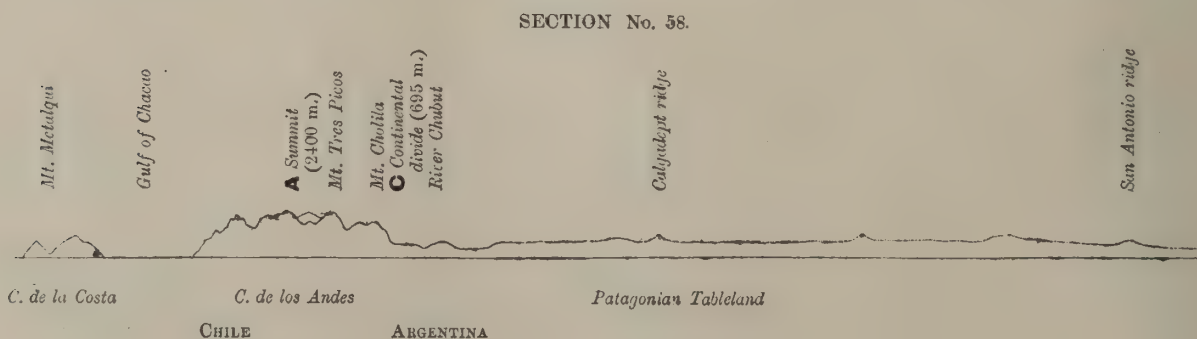
longitudinal eastern depression, while the Argentine line continues along the summit of the snowy mountains.

*Sections Nos. 56 and 57.*—Offer the same characteristics. The incomprehensible pretended high summits of the Andes of the Chilian Expert pass at



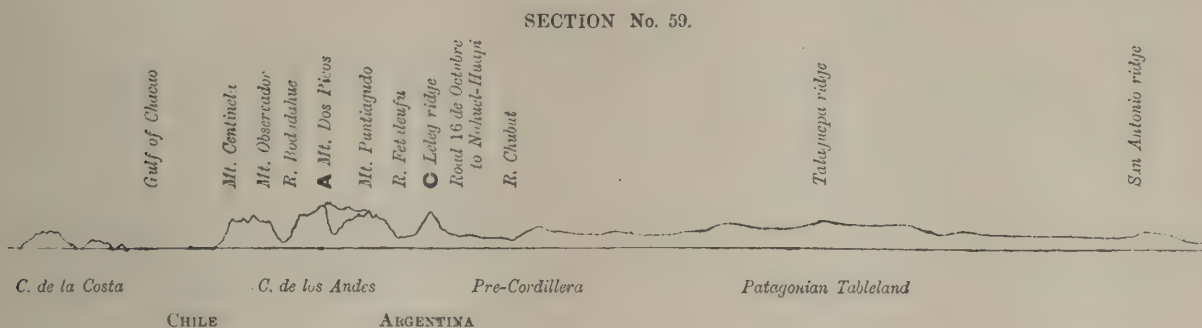
600 metres above the level of the river Maiten, and at 7 metres above the level of the ground where prosperous Argentine farms are settled.

*Section No. 58.*—The Argentine boundary line at the summit of the Cordillera commands the Chilian line, which far to the east has been located in the open plain of Cholila, where the Chilian geographers who have visited the



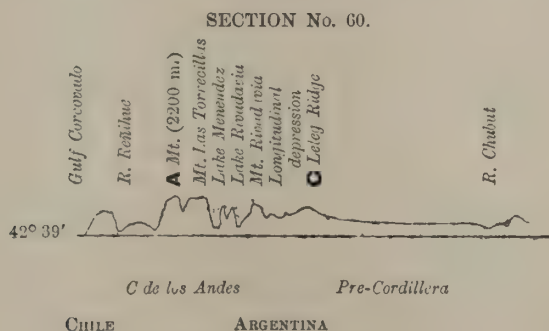
ground state that there are no mountains at all, and that in the same valley the waters run to the Atlantic and to the Pacific. Notwithstanding these opinions of his assistants, the Chilean Expert continues to think that the Cordillera de los Andes rises where the waters of the continent run in opposite directions.

*Section No. 59.*—As in the Pre-Cordillera, represented in this section by the ridge of Leleg, the continental divide occurs, it has been proposed by the Chilean Expert to locate the boundary there, leaving aside the imposing mass

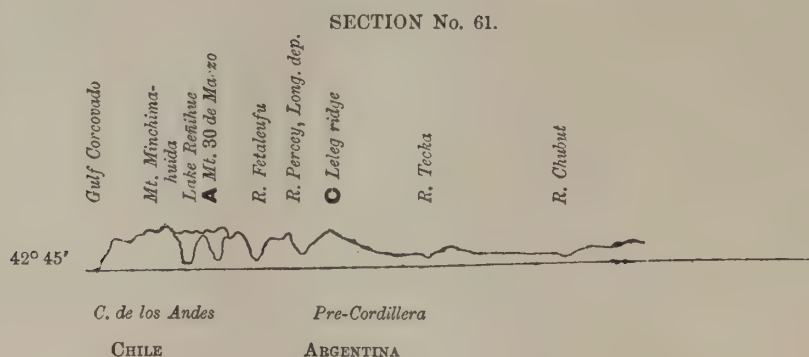


of the Cordillera de los Andes, along the summit of which the Argentine Expert thinks that the frontier must be traced, and the section shows that he is justified in stating this.

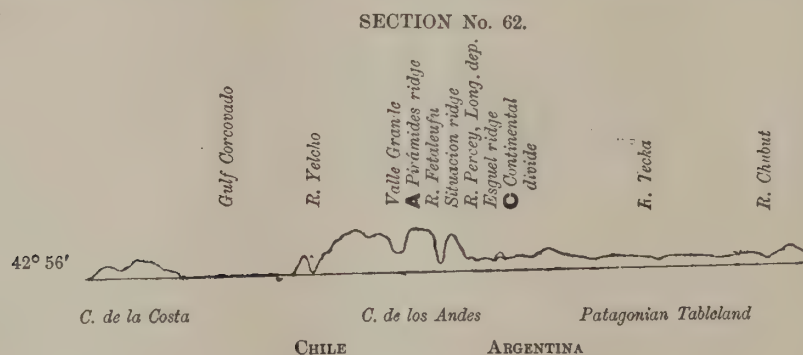
*Sections Nos. 60 and 61.*—The same can be said of the boundary in these sections. The Chilean line leaves to the west, i.e. in Chilean territory, Argentine settlements and all the eastern slope of the Cordillera, while the Argentine line does not depart from the conception of a good frontier—a barrier difficult to



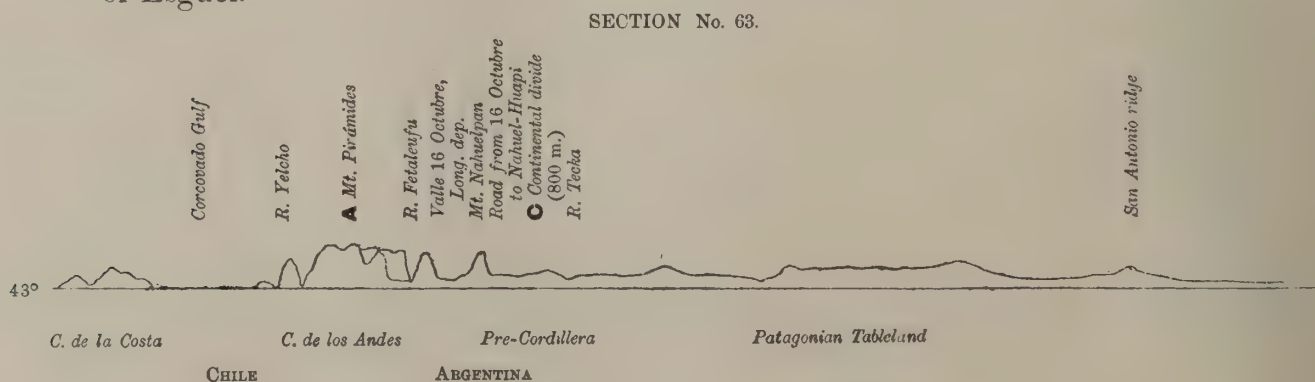
pass—and makes no encroachment in Chilean territory, as it leaves to Chile the western slope of the Cordillera, considered as such by the Chilean geographers who have visited the region.



*Section No. 62.*—The Chilian Expert, after having abandoned the Cordillera and the longitudinal eastern depression, to locate in the summit of the broken ridge of the Pre-Cordillera the boundary line, descends in this section to the east of this ridge, and traces the limit in the plain of Esguel. The summit of the main chain of the Andes, according to his interpretation, should be sought

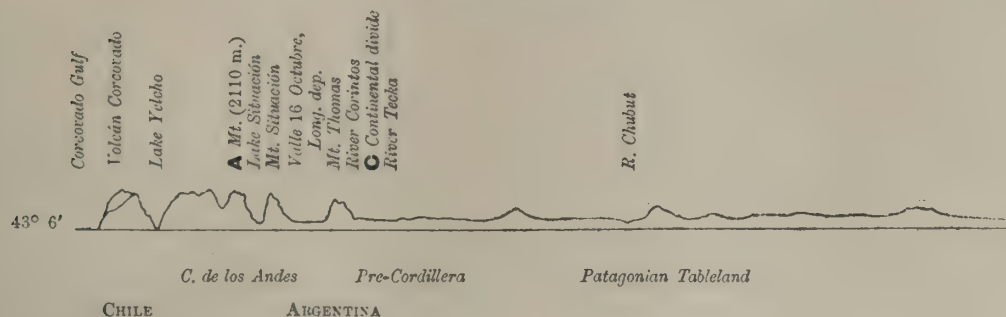


here underground, as on the surface there are no visible indications of waters running to the two oceans. The Argentine line, meanwhile, always continues along the snowy crest of the Cordillera, which is invisible from the low meadows of Esguel.

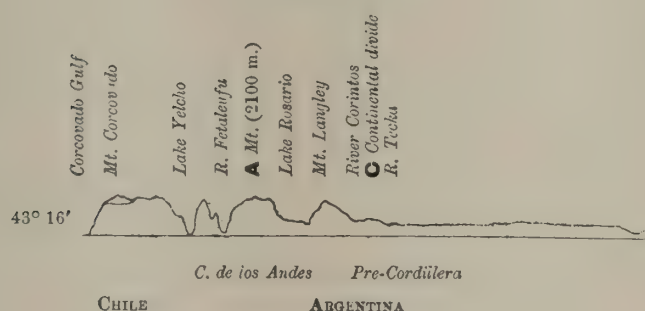




SECTION No. 64.

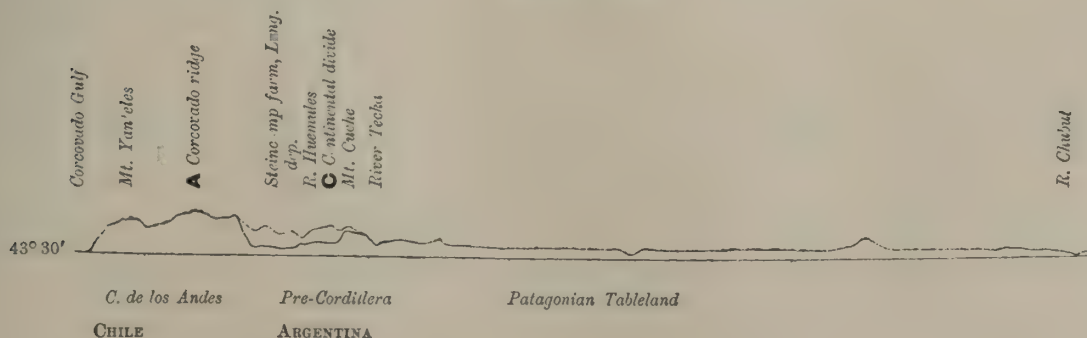


SECTION No. 65.



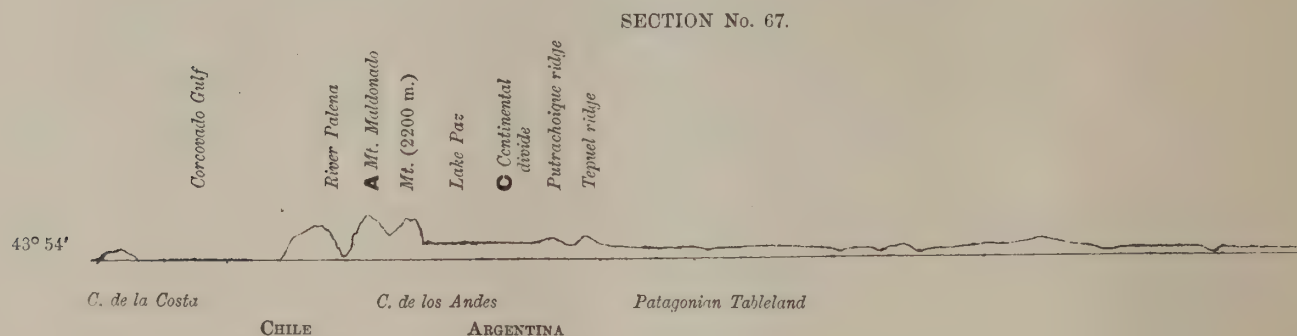
Section Nos. 63, 64 and 65.—Similar facts are to be seen. Where the Chilean Expert imagines that the main chain exists, and where he, therefore, proposes the boundary to be marked out, there are only morainic loose materials on the old levels of the dried-up lakes, which, excavated in the lacustrine Patagonian tableland, existed till post-glacial times. The Argentine line continues along the snowy crest of the Cordillera, passing across the gaps where rivers intersect the range.

SECTION No. 66.



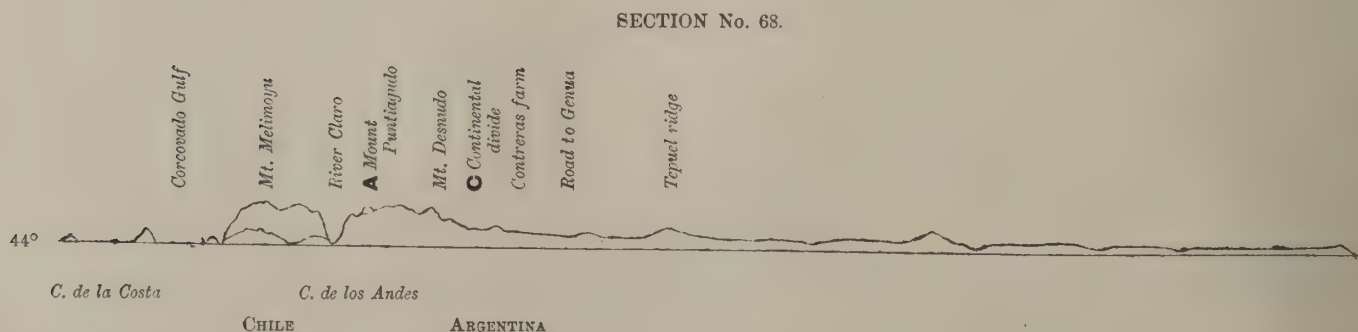
*Section No. 66.*—At  $43^{\circ} 30'$  S. lat. the Chilian line returns to the summit of the Pre-Cordillera ridge, but always within Argentine territory, as is the case with its greater extent to the south of Mount Perihueico. The Chilian geographers have recognised that the Colonies 16 de Octubre and Carrenleufu are at least at the eastern slope of the Andes, which commences in the point where, in the snowy ridge of the main chain, the Argentine Expert locates his line.

*Section No. 67.*—Shows why the Representative of Chile has informed the Tribunal that the boundary line proposed by the Chilian Expert runs within the "Andean system," as it was impossible for him to maintain that this line runs



within the Cordillera de los Andes, or even in its eastern foot-hills. The Putrachoique and Tepuel Hills are independent of the Cordillera, as has been ascertained by the Chilian geographers and as is confirmed by this section, representing the Chilian line along the flat ground far to the east of Lake Paz, which occupies a depression similar to that forming the Gulf of Corcovado in the west of the range. The Argentine line passes along the rugged snowy peaks of the Cordillera.

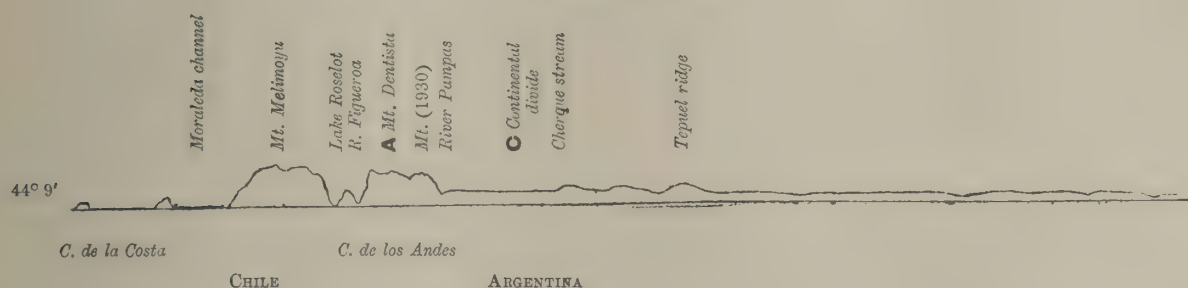
*Section No. 68.*—At  $44^{\circ}$  S. lat. the continental divide again approaches the



eastern foot of the Cordillera de los Andes, but always outside it. The summit of that Cordillera is represented by Mount Puntagudo. The Chilian line passes thus to the east of the range, while the Argentine line runs along its snows. Tepuel Hills occupy a geographical situation to the east of the range, analogous to the most western hills rising in the Pacific Ocean as southern prolongations of the Cordillera de la Costa, which has never been considered by the Chilian geographers as Cordillera de los Andes.

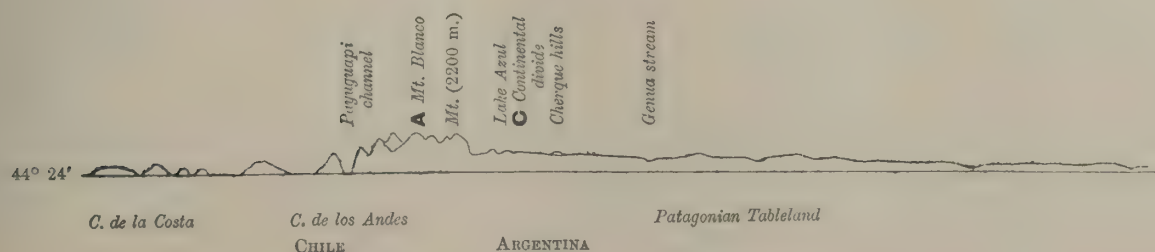
*Section No. 69.*—The Chilian line, far to the east of the Cordillera, runs through the plains where the continental divide is cut by the wagon roads which connect the different Argentine settlements there existing. It is unnecessary to multiply evidence to prove that no mountain ridge exists, as the section itself is sufficient to show this. Nevertheless, the Chilian Representative has informed the Tribunal that this plain must be considered as a part of the Cordillera de los

SECTION No. 69.



Andes, since he has attempted to show that the line traced by the Expert of his country is where it should be. The Argentine Expert, having studied which mountain mass may in that latitude be considered as the main chain of the Cordillera, has found that it is the most compact and continuous snowy ridge over which he carries his boundary. The highest mountains are to the west, but they are intersected by channels coming from the Pacific.

SECTION No. 70.





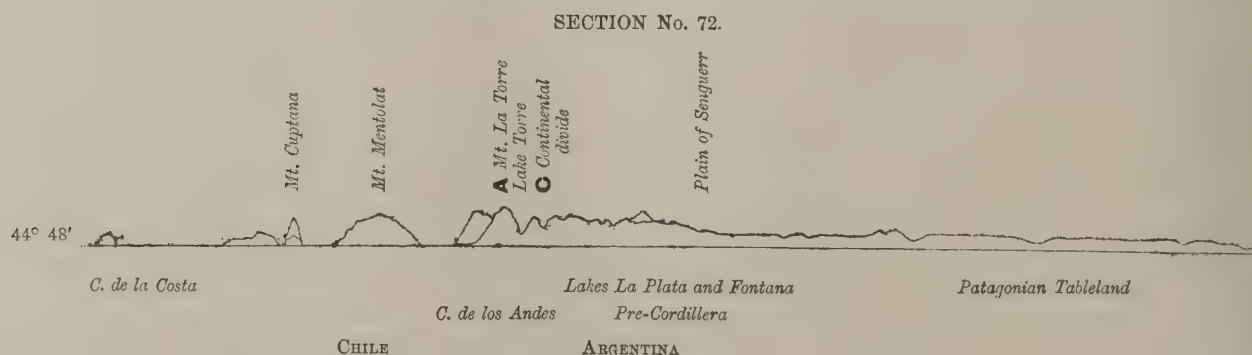
*Section No. 70.*—The Patagonian tableland, sloping gently to the east from the eastern foot-hills of the Cordillera, is clearly seen in this section, as is the Cordillera itself, culminating in Mount Blanco, where the Argentine boundary runs. Though the Chilian line passes over the tableland, outside and to the east of the range, the Chilian Expert has pretended that his line has been projected over the “highest crest of the Andes.”

*Section No. 71.*—In this section the ground between the Cordillera and the eastern small hills is deeply burrowed by the old outlets, at different levels, of the large dried up lake; its profile is therefore more salient, but in reality these undulations are not mountain ridges at all, being merely produced by the



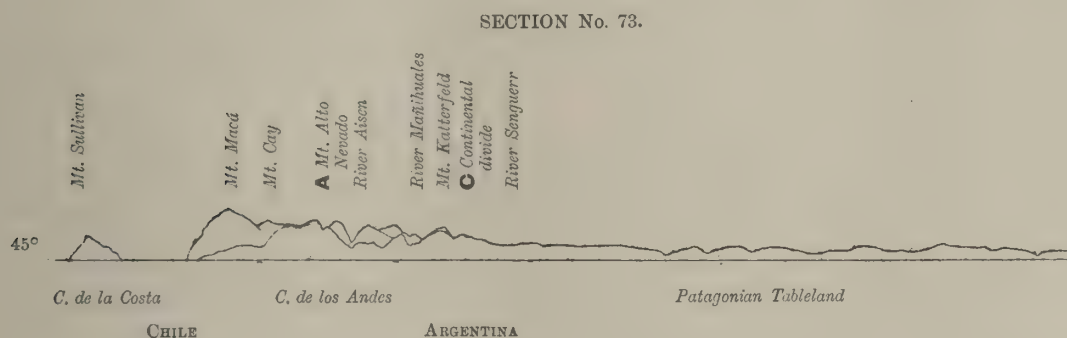
erosion of the horizontal tertiary beds. The continental divide which the Chilian Expert tries to make coincident with the highest summits of the Cordillera de los Andes which may divide the waters, passes across these beds, leaving far to the west the Cordillera along which, in its true summit, the Argentine line runs.

*Section No. 72.*—The Chilian line, after having run longitudinally across the eastern plain, turns abruptly to the west, following the continental divide which approaches the main chain of the Cordillera, and thus the two boundary lines



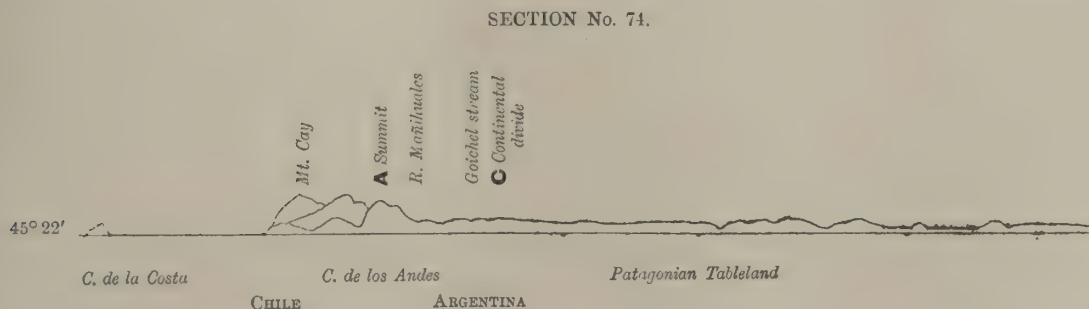
nearly meet. As has been said on page 877, this proximity of the two lines would in reality not be of long duration, as erosion, wearing away to the east the present continental divide, i.e. the "highest crest of the Andes" of the Chilian Expert, would gradually change its position towards the plains of the river Senguerr, one hundred miles to the east. The immovable boundary of Nature and Treaties followed by the Argentine Expert is not subject to any such change, but will permanently remain in the Andean crest.

*Section No. 73.*—From the west of Lake La Plata the Chilian line along the continental divide turns sharply to the east and then to the south-east of Mount Katterfeld, in the eastern slope of the foot-hills of the Pre-Cordillera, while the



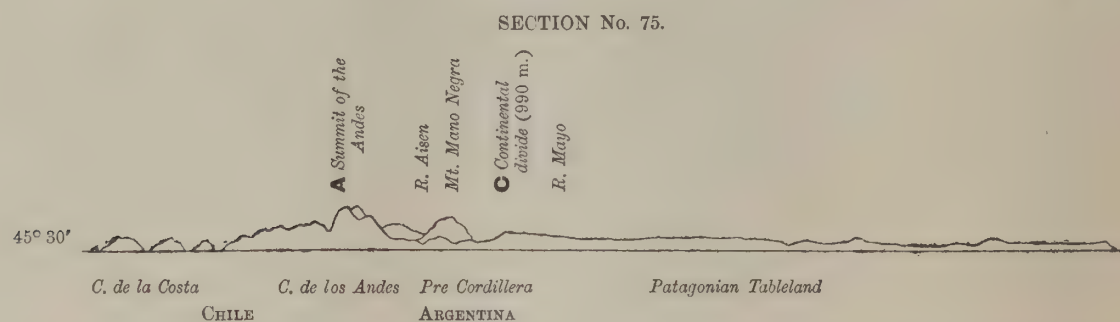
Argentine line continues among the high peaks and glaciers of the main chain of the Andes. Mount Macá, which is the highest point in the section, corresponds to the western chain of the Cordillera, and, being so peculiarly cut by the channels of the Pacific, the Argentine Expert has not taken it into account when planning his line.

*Section No. 74.*—The Argentine Expert, in accordance with the letter and spirit of the Treaties of 1881 and 1893, has traced his boundary line in such a manner as to leave to Chile the lower part of the course of the river Aisen,



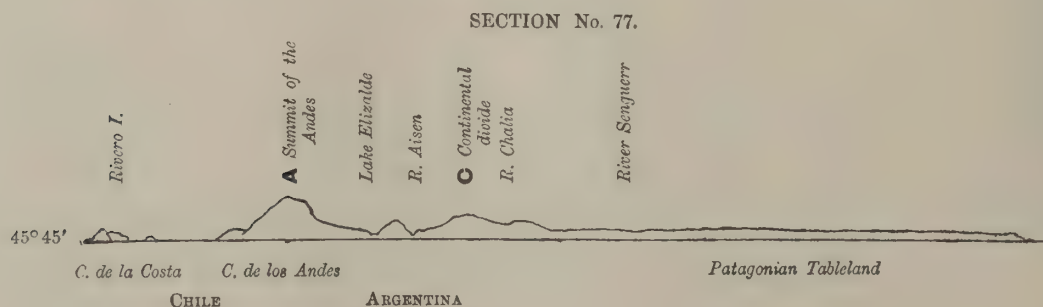
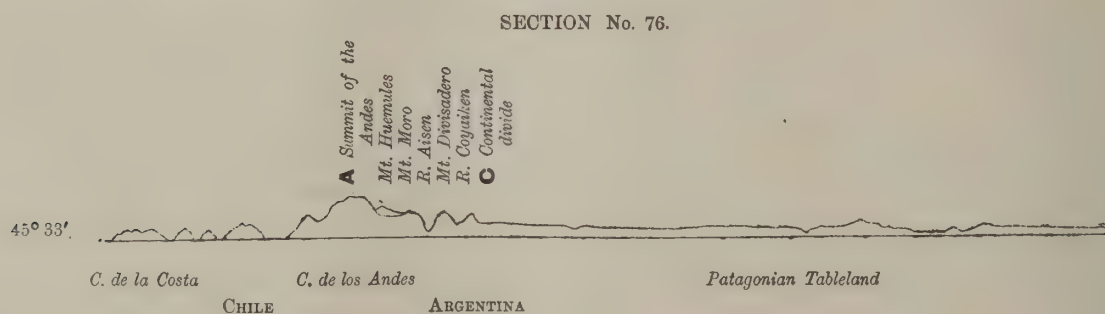
following the eastern snowy ridge of that part of the Cordillera, while the Chilean Expert, who so often departs from the Treaties, has traced his line in the low plain of Goichel, without taking into account that the physical condition of the ground is entirely opposed to his own interpretation of those Treaties.

*Section No. 75.*—Shows the Pre-Cordillera at the centre of the large longitudinal depression, having to the west the Cordillera de los Andes, along the



summit of which the Argentine line runs, and to the east, the western edge of the table-land, where the Chilean Expert has located his line, which continues to be completely outside the region where it must be confined according to the Treaties.

*Sections Nos. 76 and 77.*—The Chilean line runs in the tableland to the east of the Pre-Cordillera, while the Argentine line does not depart from the stipulations of the Treaties and follows the high Andean crest.





*Section No. 78.*—Is even more impressive. In it the Chilian line does not run in the tableland, but in the transversal depression excavated in it, far to the



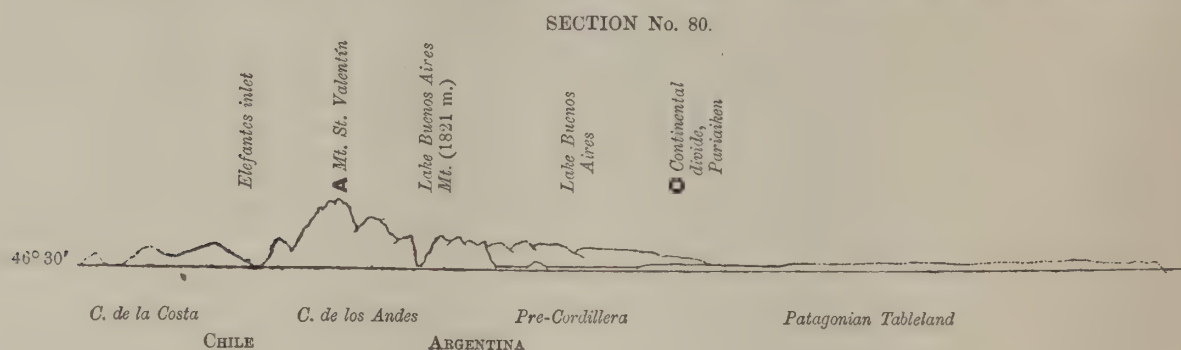
east of all the mountains and hills of the Cordillera, and of the Pre-Cordillera, while the Argentine line passes over Mount San Clemente, which is there the culminating point of the Cordillera.

*Section No. 79.*—The Argentine line is traced across the highest snowy summit of the Andes, while the Chilian line ascends from the low excavation of Laguna Blanca to the tableland near the eastern foot-hills of the Pre-Cordillera.

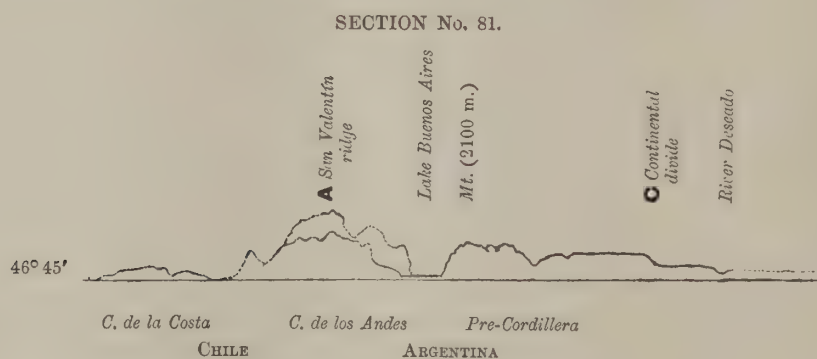


*Section No. 80.*—Represents the part of Patagonia where the Chilian Expert has made the greatest efforts to maintain that he is in the right when planning his line. The river Fénix, being an affluent of the Deseado, rises in the eastern slope of the Pre-Cordillera; it was captured by a stream coming from the west, and, until its course to the east was re-opened by the Argentine Expert, emptied into Lake Buenos Aires, the waters of which flow abnormally to the Pacific. It has been shown that the Chilian objections against that rectification are inconsistent, and the section leaves no room for further discussion. The imposing mass of Mount San Valentín constitutes in that latitude the high summit of the main chain of the Cordillera de los Andes, where the Argentine line runs, while

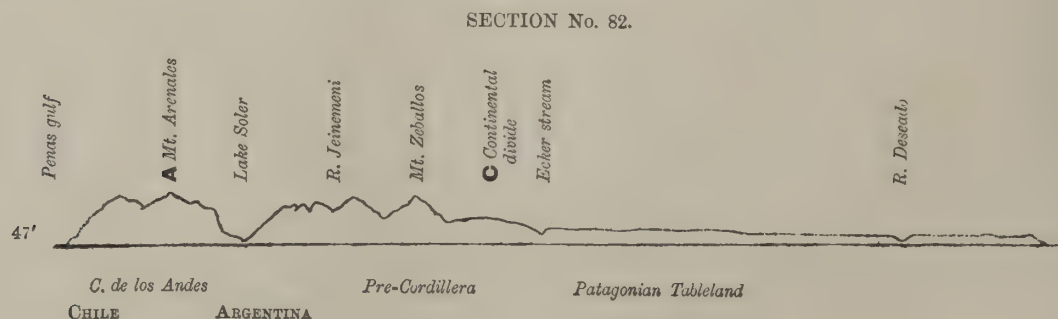
the Chilian line, leaving to the west the Cordillera, the Pre-Cordillera and an important part of the tableland, is located in the moraines of the transversal depressions where the river Fénix runs, and which extend as far as the Atlantic.



*Section No. 81.*—Represents the Chilian line running along the foot of the western part of the tableland, being therefore entirely outside the Cordillera, while the Argentine line follows the snowy crest of the range.

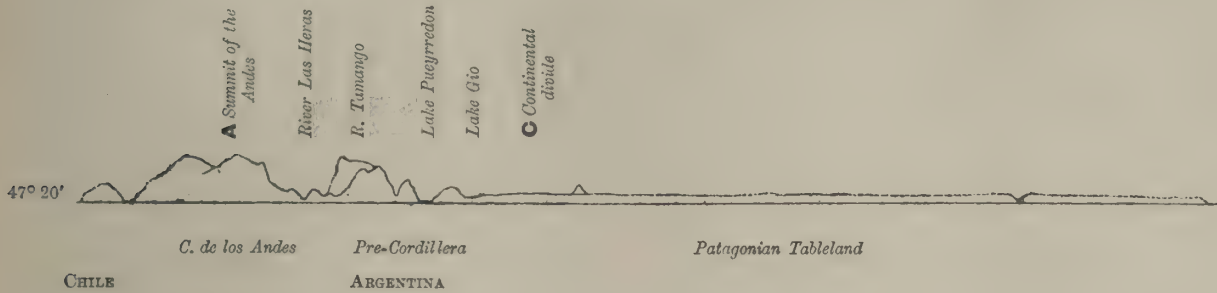


*Section No. 82.*—The preceding remarks apply also to this section, as the Chilian line runs in the lava beds which cap the tableland, while the Argentine line is always on the summit of the Andes.



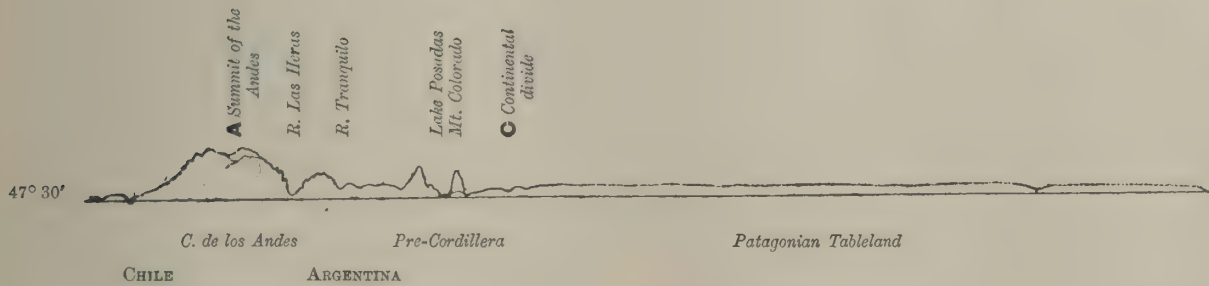
*Section No. 83.*—Represents Mount Gorro de Poivre, a small basaltic table-like hill rising from the tableland. The Chilian line runs in the depression of Gio, at a low level under the tableland, to the east of the Pre-Cordillera, as the indefinite continental divide is produced there; the Argentine line runs at the summit of the Cordillera.

SECTION No. 83.



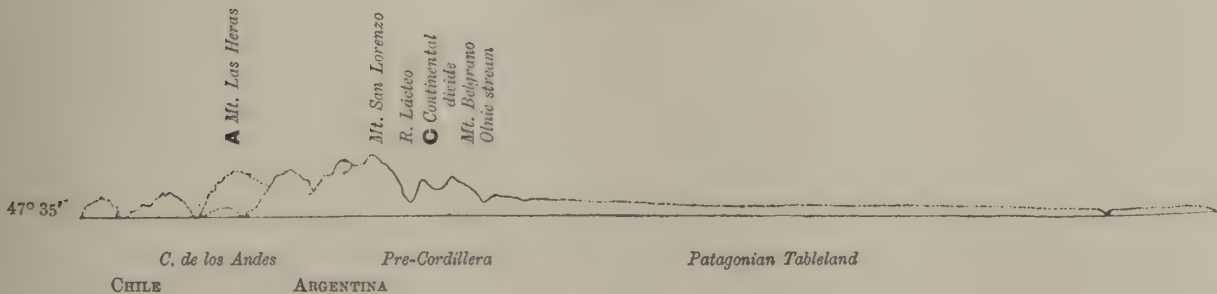
*Section No. 84.*—The same may be said of this section, where the continental divide, which the Chilian line follows, occurs in the low lands of the depression.

SECTION No. 84.



*Section No. 85.*—The Chilian line, following the water-parting, ascends the tableland which extends nearly to the eastern foot-hills of the Pre-

SECTION No. 85.

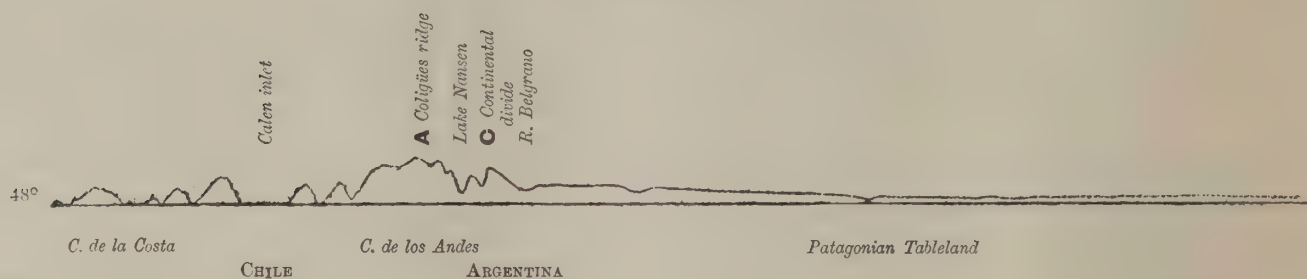




Cordillera, where the peak of San Lorenzo rises. As the heights of the mountains of the Cordillera de los Andes, in that latitude, have not been measured it is difficult to say if there are higher peaks; the general average height of the most elevated summits of the main chain being 3000 metres, and the physical character of the chain constituting always the true boundary of the Treaties, the Argentine line runs along the top of the chain.

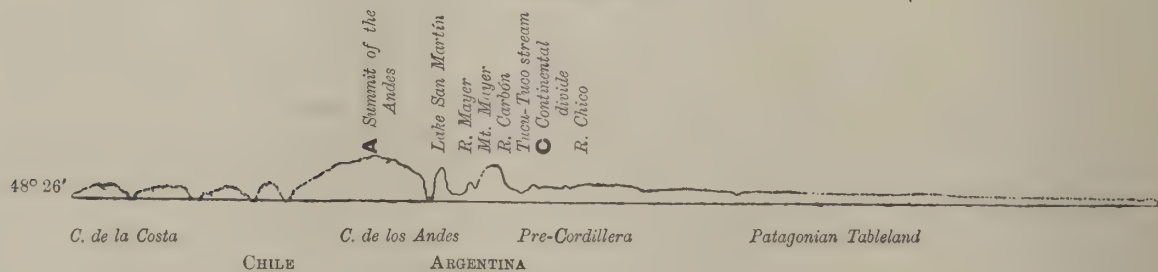
*Section No. 86.*—The continental divide occurs in the Pre-Cordillera, and therefore the Chilian line runs along it; the Argentine line has been traced in the highest ridge of the Pre-Cordillera—which separates the waters of lakes

SECTION No. 86.

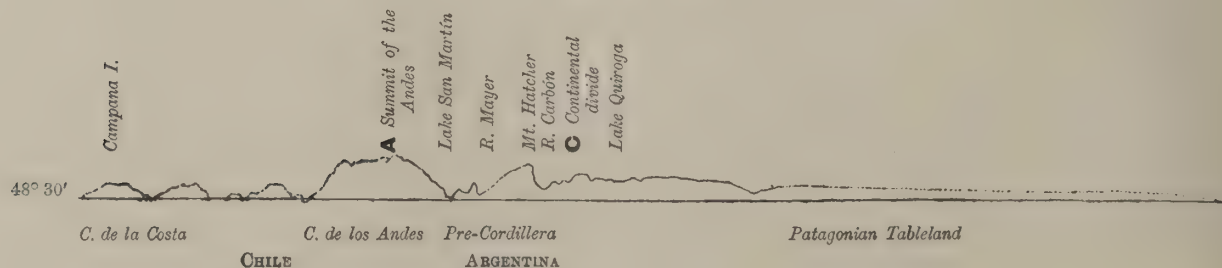


Azara and Nansen from those of the river Coligüe, emptying into the Pacific—and not in the Cordillera de los Andes, because the Calen Inlet has been opened through it, and the Agreement of 1893 orders that the coast of the Pacific Channels shall belong to Chile.

SECTION No. 87.

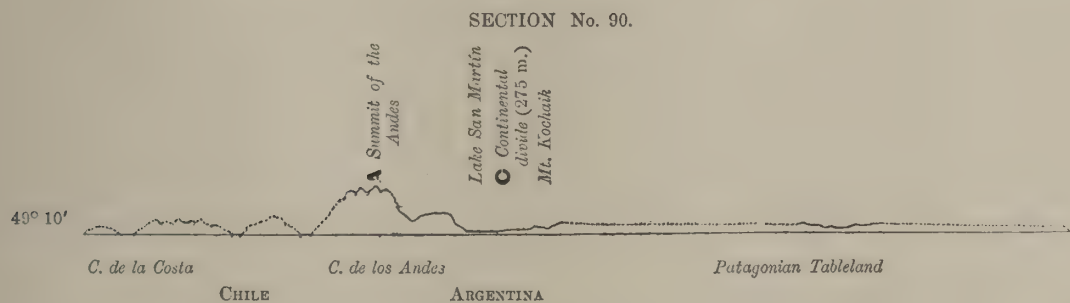


SECTION No. 88.



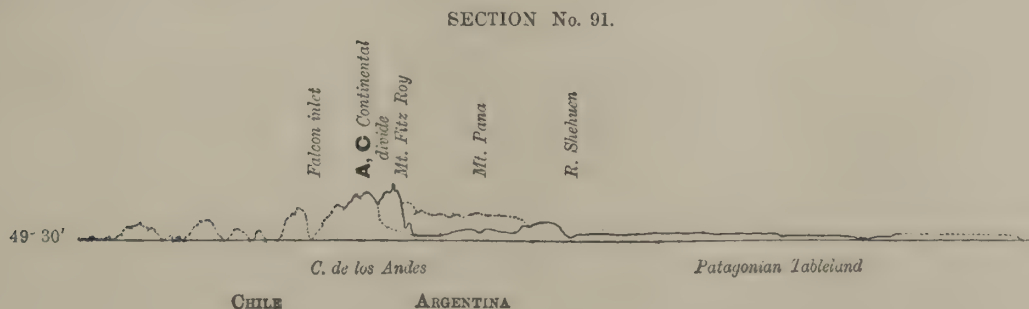
Sections Nos. 87 and 88.—The Cordillera rises to the west of Lake San Martín, while the continental divide is produced in the basaltic tableland to the east of the Pre-Cordillera. At the summit of the first the Argentine boundary line passes; and the Chilean line has been proposed in the second in a region which, until 1898, none of the Chilean surveyors had visited.

Sections Nos. 89 and 90.—The differences are more striking, as to the east of Lake San Martín the ground becomes low, and the continental divide also



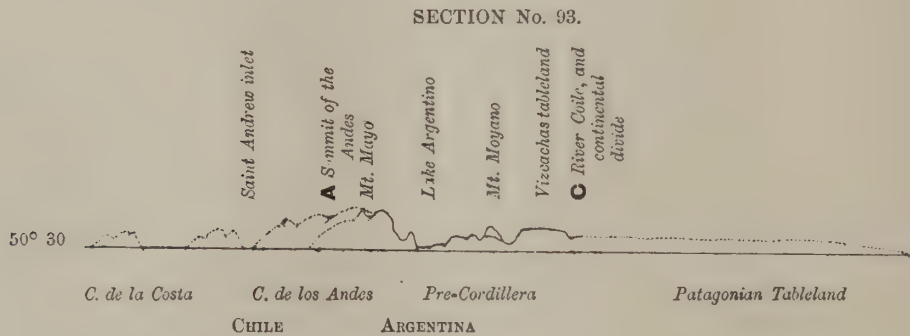
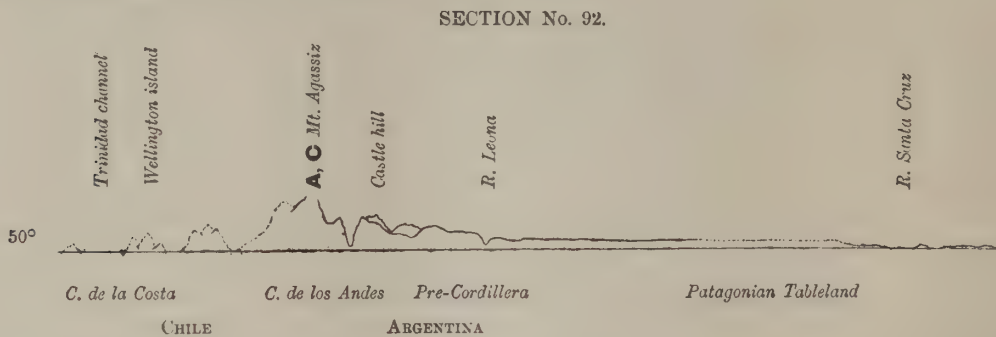
descends, while the Cordillera seems to be more compact at that latitude. The error of the Chilean attempt to locate the Cordillera to the east of Mount Kochaik is clearly shown.

Section No. 91.—The Chilean line, coming from the tableland, and the transversal depression to the east of the Pre-Cordillera, turns sharply to the



west, and ascends to the summit of the Cordillera in the neighbourhood of Mount Fitz-Roy, where the water-parting of the Andean crest is to the west of the mountain as is the case with Mount Aconcagua. Both lines coincide here.

*Sections Nos. 92 and 93.*—Show also both lines coinciding, though the highest mountains have not been surveyed. It is quite probable that the watershed mentioned in the Treaties occurs in the line of high summits to which Mount Agassiz seems to belong.

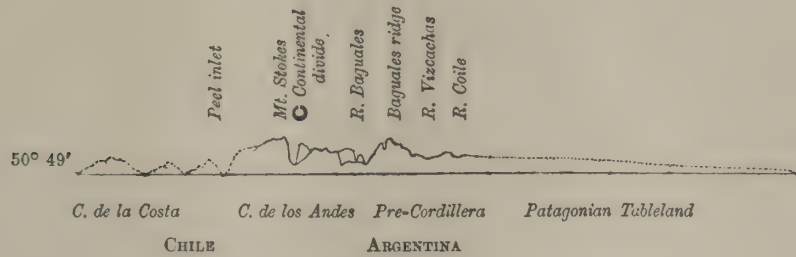


*Sections Nos. 94 and 95.*—The two lines cease to be coincident, as Mount Stokes sends all its waters to the Pacific Ocean, although being situated to the





SECTION No. 95.



east of the Andean crest. Thus the Chilean line is proposed to the east of the western part of Lake Argentino in the eroded Pre-Cordillera, while the Argentine line runs in the Andean crest to the west.

*Section No. 96.*—Is one of the best proofs of the erroneous pretensions of the Chilean Expert as regards the location of the Andean range. The imposing

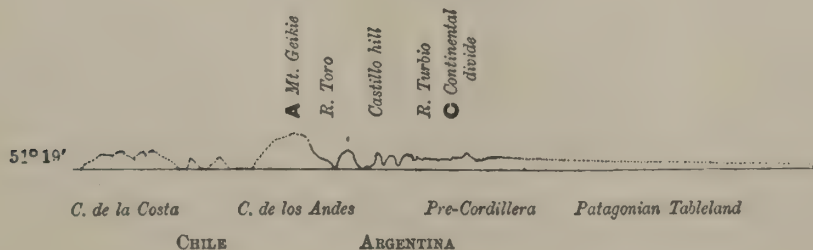
SECTION No. 96.



mass of the Cordillera, in the summit of which the Argentine line runs, has been disregarded once more, and the Chilean line is traced far to the east, in the old Atlantic channel of Coile depression, across the loose glacial material.

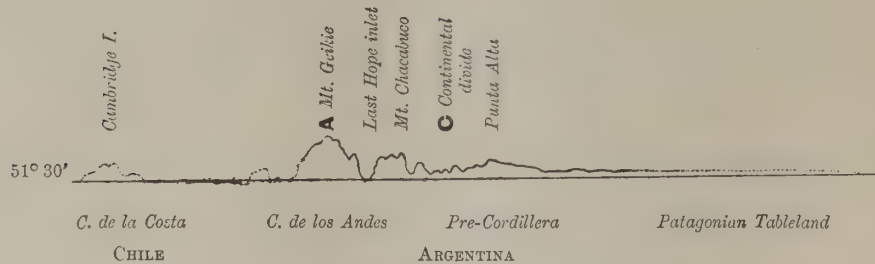
*Section No. 97.*—Shows the ground to which the Chilean line afterwards ascends, i.e. the tableland.

SECTION No. 97.

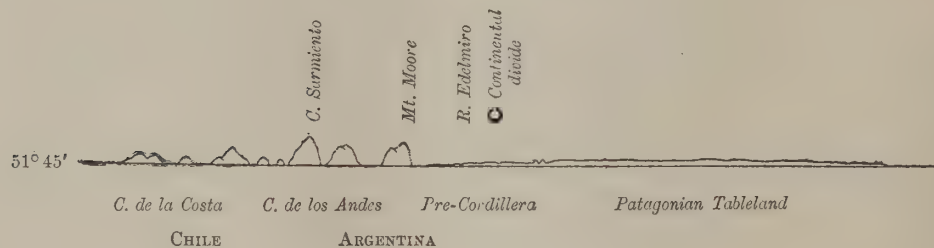


*Sections Nos. 98 and 99.*—Represent the Chilian line passing by the eastern edge of the same tableland, while the Argentine line is at Mount Geikie, in the summit of the Cordillera, in fulfilment of the Boundary Treaties.

SECTION No. 98.

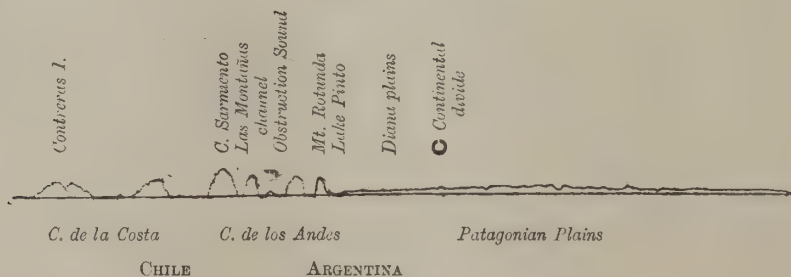


SECTION No. 99.



*Section No. 100.*—Represents the southern region of the boundary, and shows once more the accuracy of the observations of Ladrillero, Skyring, Kirke, Rogers, Ibar, Bertrand and the Argentine Expert, according to whom there

SECTION No. 100.



are no Andean ridges at all in this latitude, where the continental divide occurs ; it further proves that the Chilian Expert has been in error when carrying out the prescriptions of the Treaties. The Treaties order that if, in the neighbourhood of parallel 52° S. lat., the Cordillera is intersected by channels of the Pacific,

in such a manner that their waters surround it to the east, their coast line must belong to Chile. The Chilean Expert has not accepted the statements of the explorers mentioned, maintaining on his part that the main chain of the Andes, i.e. the line of the highest summits of the Andes which divide the waters, passes in that region where there are only the pools and marshes in the frontal moraine occupying the transversal depression which contains the river Gallegos, and which extends from Obstruction Sound to the Atlantic.

In the preceding sections, some errors may, perhaps, be detected in the part to the west of the Argentine line, i.e. in the Chilean territory, as the documents to hand referring to this region are not very accurate; but those errors are not likely to modify, to a great extent, the general orographical features. The adopted horizontal scale is 1 m. : 1,000,000, the vertical one having been exaggerated ten times.

Every one of the one hundred sections confirms all that has been said on the location of the boundary. The Argentine line is represented in them in the summit of the Cordillera de los Andes, leaving to Chile all the region which has always been considered as Chilean territory, i.e. the western slope of the Andes, and all the lands to the west of its foot as far as the Pacific. They show the central valley of Chile, where the principal cities, Santiago, Rancagua, Talca, Chillán, Los Ángeles, Temuco, Osorno, Puerto Montt, etc., lie to the west of the Cordillera de los Andes and to the east of the Cordillera de la Costa, as has been constantly recognized; they also show the eastern general longitudinal depression, separating the Cordillera from the Pre-Cordillera along the whole extent of the boundary under consideration of Her Britannic Majesty's Government. *The Chilean line, when it does not agree with the Argentine line, appears outside the Andes and running in another chain—the Pre-Cordillera—or through the longitudinal depression between this and the Cordillera, or through the secondary depression between the same and the tableland, or across the tableland and the low transversal excavations formed by ancient Atlantic channels, which in former times reached the eastern foot of the Andes. In every case, that line is traced where it could not be traced on lands which are unquestionably Argentine territories, to the east of the Andean barrier.* The Argentine line has been carefully planned, and the Argentine Expert has not made any attempt to encroach on Chilean territory, nor to claim what he knew was not right, in the hope of obtaining advantages. An eminent Chilean statesman has said that the Cordillera de los Andes is interposed between the two nations, and that the very high impassable barrier, with its permanent natural



profile, determines for the two countries opposite goals ; the sections make apparent the exactness of this assertion.\* Every attempt to change this natural boundary, and any effort to enforce such an alteration by accepting the line of the Chilian Expert, where it has been rejected by the Argentine Expert, would be contrary to the harmony and natural development of the Argentine and Chilian Republics.

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\* Vicuña Mackenna, *El rumbo Argentino y el rumbo Chileno*, Valparaiso, 1881.

## CHAPTER XXIX.

- Summary*—1. REMARKS ON THE MAPS ACCOMPANYING THIS REPORT.  
2. MAP OF THE NORTHERN REGION.  
3. MAPS OF THE SOUTHERN REGION.  
4. OTHER MAPS.

## 1. REMARKS ON THE MAPS ACCOMPANYING THIS REPORT.

THE transversal sections in the preceding Chapter clearly show the accuracy of the Argentine Expert's interpretation of the letter and spirit of the Treaties, and at the same time the inaccuracy of the Chilian Expert's interpretation of the same agreements; but, it being desirable that no doubt whatever should be entertained as to the correctness of the Argentine Expert in rejecting the boundary line proposed by his colleague,—where he considered that this line does not run along the summit of the Andes, as it must run according to the Treaties,—a general review of the geographical features of the Cordillera and its immediate eastern region, as shown by the maps and illustrations, has been added to the long array of proofs contained in this Report.

The different maps herewith presented are not the result of a definitive complete survey. This task would have required many years, and the difficulties opposed by the Chilian Expert whenever the Argentine Experts have urged the necessity of detailed surveys as the only means to accurately settle the boundary line,—difficulties principally based on the time they would occupy,—have hindered the carrying out of the work. Nevertheless, the general maps, numbered I., II., IV., V., VII., X., XI. and XIV., although they are only the result of preliminary surveys, give a good idea of the country, contain sufficient geographical data for forming an exact general idea of the respective claims of the two Experts, and will be a useful help for the technical Commission which Her Britannic Majesty's Government is to appoint, according to Article II. of the Agreement of 1896, in order to examine the ground where divergences have arisen.

## 2. MAP OF THE NORTHERN REGION.

*Map I.*—Represents the region included between parallels  $23^{\circ}$  and  $28^{\circ} 30'$  S. lat., and has been drawn from the results of the preliminary survey made by the sixth and first Argentine Boundary Sub-Commissions, on the western part, and of that made by the La Plata Museum surveyors in 1893 and 1895, in the eastern part. The principal points have been fixed by astronomical observations and triangulations, and the topographical features by means of sketch surveys and with the aid of photography, the heights having been calculated by hypsometrical, barometrical and trigonometrical observations. These methods have also been employed in the other maps on the scale of 1 m. : 1,000,000, and 1 m. : 500,000, thus obtaining a fairly correct idea of the general character of the ground represented.

The Cordillera de los Andes to the west contains, among others, the great summits of Licancaur, 6000 metres (19,685 feet), Tonar, 5620 metres (18,439 feet), Honar, 5460 metres (17,914 feet), Potor, 5500 metres (18,045 feet), Colache, 5670 metres (18,603 feet), Tumiza, 5670 metres (18,602 feet), Lascar, 5870 metres (19,259 feet), Overo, 5730 metres (18,800 feet), Lejía, 5650 metres (18,537 feet), Agua Caliente, 5720 metres (18,767 feet), Miñiques, 5900 metres (19,357 feet), Cozor, 5850 metres (19,193 feet), Capur, 5260 metres (17,258 feet), Pular, 6340 metres (20,800 feet), Socompa, 6080 metres (19,948 feet), Socompa Carpis, 5370 metres (17,618 feet), Tecar, 5590 metres (18,340 feet), Inca, 5500 metres (18,045 feet), Llullaillaco, 6620 metres (21,720 feet), Azufre, 5680 metres (18,636 feet), Bayo, 5300 metres (17,389 feet), Parinas, 5380 metres (17,651 feet), Del Medio, 5380 metres (17,651 feet), Colorados, 6058 metres (19,876 feet), Laguna Brava, 5338 metres (17,513 feet), Juncalito, 5950 metres (19,521 feet), Sierra Nevada, 6100 metres (20,013 feet), and 6400 metres (20,998 feet), Juncal, 5813 metres (19,072 feet), Tres Cruces, 6640 metres (21,785 feet), 6780 metres (22,245 feet), and 6356 metres (20,853 feet), Tres Quebradas, 6280 metres (20,604 feet), Dos Hermanas, 5500 metres (18,045 feet), Nevado de Jotabeche, 5870 metres (19,259 feet), Come Caballo, 5320 metres (17,454 feet), Peña Negra, 5230 metres (17,160 feet), Potro, 5900 metres (19,357 feet), Flecha, 5720 metres (18,766 feet), and Toro, 5805 metres (19,045 feet). The southern continuation of the Cordillera Real de Bolivia is much more



broken than the Cordillera de los Andes, and its principal summits to the south of parallel  $23^{\circ}$  are represented by Mounts Tucli, 5300 metres (17,389 feet), Ciénega Grande, Juere Grande, 5655 metres (18,553 feet), Incahuasi, 5860 metres (19,226 feet), and Laguna Blanca, 5579 metres (18,305 feet). The intermediary chain, described in Chapter XVII., is several times intersected by low depressions; it was taken into account by the Chilian Delegation in the Conference of Buenos Aires, having been proposed as a base for a "compromise" between the two claims. Its principal summits are Mount San Pedro, 5700 metres (18,701 feet), Ciliola, 5600 metres (18,373 feet), Jama, 5150 metres (16,897 feet), Tultul, 5200 metres (17,064 feet), Calalaste, 5350 metres (17,553 feet), Negro Muerto, 5894 metres (19,338 feet), Palca, 5480 metres (17,979 feet), and Famatina, 6130 metres (20,112 feet).

A glance on the Map will show that neither the eastern chain, i.e. the Cordillera Real de Bolivia, nor the intermediary chain, was the boundary agreed upon in the Treaties of 1881 and 1893, and in the Agreement of 1896, and that these Conventions referred to the western chain, the true Cordillera de los Andes, running north and south throughout the length of the continent, and which has always separated Chile from Bolivia and from the Argentine Republic.

The pretensions of the Chilian Expert contained in the Record of September 3, 1898, are untenable, and the support of the Chilian Delegation at Buenos Aires, based on erroneous geographical information upon the location of the Cordillera de los Andes, had in view a purpose impossible to be attained, i.e., to show that the Chilian Expert's boundary line, which only took into account an internal law of Chile, contrary to the Treaties, had been traced in accordance with the same Treaties. Never was the eastern chain considered as the Cordillera de los Andes by the Spanish, Argentine, nor Chilian Governments, nor by statesmen, historians or geographers, and as regards its southern part, where lies the "Mineral of Famatina," it is evident that it forms the central mountains of Argentina. Following the summit of the Cordillera Real de Bolivia, the frontier would have been carried into the centre of the Argentine territory, and from there it could not have reached the Cordillera de los Andes along high elevations, as only vast low plains are there to be found. In order to avoid this difficulty it was, therefore, necessary to draw that frontier in the Cordillera Real de Bolivia, and to abandon it in the neighbourhood of  $26^{\circ} 45'$ , turning to the west so as to join the Cordillera de los Andes near the mass of Tres Cruces. This has been done by the Chilian Expert and the Chilian Delegates.

By this alteration of direction the ideal eastern chain cuts the intermediary chain near Mount San Francisco—an isolated volcano situated to the east of the axis of the latter chain—where at its northern slope a landmark was erroneously planted in 1892. The Chilean Delegates, as a compromise, proposed that the boundary line should be traced along the summit of the intermediary chain, including in it Mount San Francisco, but as it does not belong to the Cordillera de los Andes the proposal was not accepted (see Chapter XVII.).

The Demarcating Commission determined the Cordillera de los Andes as the boundary to the south of about 24° S. lat. (Mount Socompa), it being thus recognised that that Cordillera was the one described by the Argentine Expert, and, in consequence, that it was not the line of summits proposed by the Chilean Delegates (page 631) from Mount Zapaleri to Mount San Francisco (the central chain of the Puna); the Map clearly shows the accuracy of this decision.

The Argentine line passing from Pirca de Indios to Mount Tres Cruces needs no further defence, as it possesses all the conditions agreed to in the Treaties—height, watershed, north to south direction, etc.—and forms an excellent natural boundary; but the principal importance of the Map is, that it contains a geographical demonstration of the true meaning that the Government of Chile, whose instructions were followed by the Chilean Delegation in Buenos Aires, give to these conditions. The Treaties stipulated that the boundary was to be traced along the Cordillera de los Andes. The Chilean Delegates, supplying what was left wanting by the Chilean Expert in the Record of September 3, 1898, looked for that Cordillera, and said that it was formed by the eastern and western chain existing in that region. The Treaty of 1881 ordered, besides, that the frontier must run along the line of the most elevated crests of the Cordillera that may divide the waters, and the Protocol of 1893 considered this line as synonymous with the main or central chain of the Cordillera. The Chilean Delegates, trying to comply with these stipulations, erroneously determined that the main chain was the eastern one, and consequently proposed to trace the boundary along its line of summits. The Protocol of 1893, when interpreting and confirming the letter and spirit of the Treaty of 1881, established that, if the main chain was cut by watercourses, that part of those waters situated to the east of the general watershed should continue to be Argentine territory, and that part running at the western slope should continue to be Chilean territory. Notwithstanding the continually repeated pretensions of the Chilean Expert that the boundary must run along the continental divide,



the Chilian Delegates, though aware that the chain that they thought to be the principal one was cut by rivers flowing from one side to the other, based their proposition on the fact that this pretended main chain of the Cordillera de los Andes, "*combined the conditions of height, continuity of elevated summits, and division of waters contemplated in the Treaties,*" and proposed to trace the line in such a manner that the eastern part of the course of the rivers Burras or Susques, and Patos, were left in Argentine territory, and the western part in Chilian territory. This proposal was *afterwards approved by the Chilian Government*, and, as can be seen in the Maps, the intersections of the chain by rivers which were, in consequence, cut by the boundary line are produced many times further south in the main chain of the Cordillera de los Andes. Therefore, what was considered to be the meaning of the Treaties in the northern part of the frontier must be applied to the southern one. These Maps may be used as a guide, as they show how natural is the boundary line proposed by the Argentine Expert, as far as 52° S. lat., how inconsistent are the arguments brought against it by the Chilian Expert and by the Chilian Representative, and how consistent are the arguments against the line proposed by the Chilian Expert, supported afterwards by the Chilian Representative.

The illustrations in Chapter XVII. of several points of the region represented in this Map, all support the claims of the Argentine Expert.

1. With regard to the location of the true Cordillera de los Andes, i.e. the range which runs to the west of the continent, those claims are in agreement with the surveys of Señor San Roman (page 605), the Chilian geographer best acquainted with the Puna de Atacama, who confirms the views held by the Chilian Government, before 1898, by Señores Barros Arana, Bertrand, Muñoz and Sayago, and by the early authorities, such as Philippi (Plate XXVIII.), Tschudi (Plate XXIX.), Burmeister (page 609), and Petermann (Plate XXX.). Those authorities show at the same time to be erroneous the statement of the Chilian Delegates at Buenos Aires, that the main chain of the Andes is the one which continues up to the centre of Argentina, and to be equally erroneous the planting in 1892 of the landmark of San Francisco, in a point to the west of the intermediary chain, but to the east of that considered as the true Cordillera, and, therefore, outside the region where the frontier line was agreed to pass.

2. Those illustrations support the claims of the Argentine Expert as regards the normal watershed of the main chain of the Andes, which he considers to be



the one occurring in the ridge between the eastern and western slopes of that main chain, and, as a logical consequence, they also support the cutting of the watercourses, which rising in either the one or the other of the slopes intersect the chain running in a direction opposite to that of their natural drainage, and of the watercourses that, rising outside to the east of the Cordillera, flow to the Pacific. The map of Señor Alejandro Bertrand, on page 617, represents the "Río de las Burras," cutting through that chain which the Chilian Delegation determined as the main chain of the Andes; and the map of Señor San Roman, on pages 620 and 621, depicts the same intersection, as well as another of a similar character, that of the "Río de los Patos." As these important facts proved the fallacy of the Chilian Expert's theories on mountain watersheds, and on mountain natural boundaries, he suppressed them in his map, reproduced on page 626. The intersections were however depicted, after his resignation, in another Chilian official map (page 627), indicating the frontier afterwards proposed by the Chilian Delegation, a map more accurate as regards the boundary than the one in a scale 1 m.: 1,000,000, presented to Her Britannic Majesty's Government.

The sketch map drawn by Sir Martin Conway, from his survey of the western slope of the Cordillera Real de Bolivia, from Mount Illampu to Mount Illimani (Plate XXVI.) also confirms the views of the Argentine Expert, as the river Sorata to the north, and the streams Chuqueajo, Carocato, and Sapahaqui, forming the river La Paz to the south, are represented as rising on the western slope, or in the plains extending towards the west from the foot of the range which they intersect. If the theories of the Chilian Expert are applied to that range, this "western slope" should be converted into the eastern slope, and the gigantic snowy ridge forming the crest of the Cordillera Real would be thus replaced by the sandy and gravelly plains of the former extension of Lake Titicaca. The error conveyed by those theories is still more apparent by comparing the natural crest of the chain, as drawn by Sir Martin Conway in a second map published during the printing of this Evidence,\* with the imaginary one of Señor Barros Arana.

The diagrammatic sketch showing the different chains between the Cordillera Real de Bolivia and the Cordillera de los Andes, to the north of 34° S. lat.

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\* The highest part of the Cordillera Real de Bolivia, from a triangulation and plane-table survey by Sir Martin Conway, 1898, and various unpublished documents (The Geographical Journal, vol. xv., 1900).

Plate XXXI. renders still more evident the accuracy of the Argentine line, and the inaccuracy of the Chilian line, in the neighbourhood of parallel 27° S. lat., where the first differences submitted to the Arbitration of Her Britannic Majesty's Government have arisen. The figures in the text, on pages 585 to 591, show some of the summits which the Argentine Expert indicated in the Record of September 1, 1898, in order to plant the landmarks, which have in part been accepted by the Demarcating Commission of Buenos Aires (March 1899), without tracing the line from summit to summit, and without taking into account if that line should cut watercourses or not, as these summits were considered to be in the general crest of the Cordillera. Plate XXVII. shows the region where the difficulties have arisen, and where the Argentine Expert maintains that the line of the Treaties, the line of the main chain of the Cordillera, and the best natural boundary exists, being convinced that a transversal depression does not interrupt the continuity of the Cordillera axis: an assertion which has been also accepted by the Chilian Delegates, when affirming that the line they proposed, though interrupted by rivers, "*combined the conditions of height, continuity of elevated summits, and division of waters contemplated in the Treaties,*" thus rendering apparent the harmony of opinions between the Argentine Expert and the Chilian Delegates on the continuity of a chain. Plate CXXI. represents the region of Mounts Gordo and Agua Calientes, where the river Patos intersects the Cordillera Real de Bolivia, the "eastern cordon," considered as continuous not only by the Chilian Delegates but also by the Chilian geographer, Señor Muñoz, who surveyed this zone (see page 623). As some of the Chilian geographers have lately maintained that in the southern part of the continent the Cordillera, as a continuous range, does not exist, this plate is of great importance: especially *as in no part where differences have arisen and where the range is cut through by rivers is there an open space in the Cordillera de los Andes of such extent, nor approaching such an extent, as those presented,—in the cuttings of rivers Burras and Patos,—by the "eastern cordon" which the Chilian Delegation, whose proceedings have been fully approved by the Chilian Government, considered to combine "the conditions of height, continuity of elevated summits, and division of waters, contemplated in the Treaties."*



### 3. MAPS OF THE SOUTHERN REGION.

Lack of time has prevented the accompanying of this Report by a map of that part of the Cordillera where the two lines coincide, but the maps on pages 644 and 650, by Dr. Burmeister, a high authority quoted by the Chilean Representative, are sufficient proofs of the correctness of the Argentine interpretation of the boundary, which is that imposed by orography, and recognised by geographical and political common sense as the best frontier line, and for the tracing of which the Argentine Expert has not taken into account the continental divide that, in this zone, occurs along the traditional boundary, illustrated with the figures on pages 22, 24, 26, 27, 28, 37, 43 and 673, reproduced from the works of Azara, Espinosa and Bauzá, Antonio de Herrera, Miers and Gilliss—unimpeachable historical and geographical authorities. Besides, for the purpose of this Report, Plates II., III. to VI., VIII., XXVII., XXXII., and figures on pages 663, 672, 674, 683, etc., are sufficient to demonstrate that the predominant character of the line is the orographical one, unmistakable in all the points by which it passes, which are in every case situated in the Cordillera de los Andes, the traditional Cordillera Nevada, and the summit of the Cordillera de los Andes of the Chilean statesmen, i.e. the definitive boundary accepted by both Experts in the Record of October 1, 1898.

*Map II.*—Contains the eastern slope of the Cordillera de los Andes, the ridges corresponding to the Pre-Cordillera and the intermediate valleys. The first difference between the Experts, to the south of parallel 40° S. lat., is clearly visible. The main chain of the Cordillera, along which the Argentine line runs, rises to the west of Lake Lacar, as is also demonstrated by Plates LII. to LV.; the Map, Plate LI. Fig. 1, and Plate LVII., show the Chilean line in its astounding bend, which carries it outside the Cordillera, and outside the stipulations of the Treaties.

This Map and the illustrations will therefore help to test the reasons adduced by the Experts in support of their respective lines : the Argentine line being based on the Treaties and true principles of geographical, political and economical sciences, and supported, as regards the situation of the main chain of the Cordillera, by the figure on page 120, by Plate LVII., and by the foreign precedents shown in pages 710, 711, 712, 715, 717-720. The Map proves that the Argentine occupation, represented in pages 730 and 734, of the region erroneously claimed



ARGENTINE-CHILIAN BOUNDARY QUESTION.

*Mount Agua Caliente.*

*Mount Gordo.*

*Mount Ratones.*

*Mount Blanco.*

*Mount Cuzco.*

*Ridge to the East and South-East of River Los Patos.*



N.W.

W.



N.E.

E.

S.E.

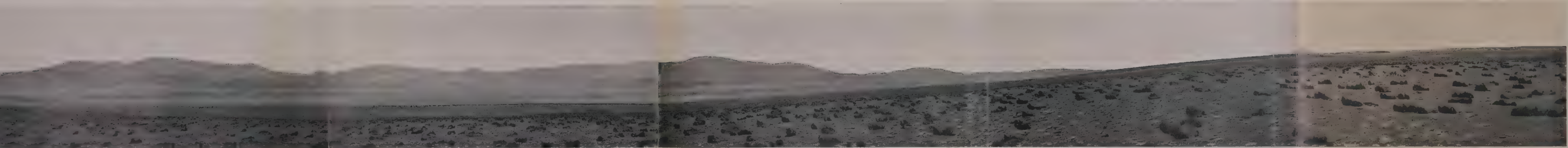
PANORAMA FROM THE SOUTH OF VEGA DE LOS PATOS.

Showing the River Los Patos cutting the Southern extension of the Cordillera real de Bolivia, *La*, "the Eastern Ridge of the Cordillera de los Andes," according to the Chilean Delegates in Buenos Aires, who considered that "the 'ridge' combines the conditions of height, continuity of elevated Mount Agua Caliente, snow-capped peak Diamante or Meara."—Record of 3 September, 1898.



*Ridge to the East and South-East of River Los Patos.*

*Mount Diamante or Mucura.*



E

SE

S

*Rising Ground to the South of Vega de Los Patos.*

SW

[Face p. 1047]

PANORAMA FROM THE SOUTH OF VEGA DE LOS PATOS.

Bolivia, i.e., "the Eastern Ridge of the Cordillera de los Andes," according to the Chilean Delegates in Buenos Aires, who considered that "the 'ridge' combines the conditions of height, continuity of elevated summits and division of waters stipulated in the Treaties," the Chilean line passing by "Mount Blanco, Mount Guabo, Mount Agua Caliente, snow-capped peak Diamante or Mucura." -Record of 3 September, 1898.





as Chilian is justified by the physical features of the ground. The Chilian Representative has attributed exceptional importance to the geographical competence of Dr. Steffen, and it is important to point out that this Map demonstrates the accuracy of the observation of this geographer that, "*Lake Lacar forms one of the series of lakes running in a north and south direction which comprises also Lakes Trafal, Lolog, Aluminé, Nahuel-Huapi, etc.*" (see page 700).

*Map III.*—Is the result of a plane-table survey of the neighbourhood of Lake Lacar, Ipela ridge and its intersection by the river Huahum; proves more conclusively that the Cordillera does not rise to the east but to the west of the lake; and indicates the scientific watershed in the main chain, the normal Atlantic dependency, and the fjordian character of this lake and Lake Lolog, ancient arms of the former lake of Chimehuin. It also shows the existence of numerous Argentine settlements to the west of the proposed Chilian boundary line, and the non-existence there of any Chilian settlement.

*Map IV.*—Represents the region considered in Chapters XX. to XXII. of this Report, showing how geographically inaccurate is the Chilian line, which wanders across high peaks, hills, swamps and plains claimed as the main chain of the Andes.

If a comparison is made between this Map and that of the Chilian Boundary Commission, presented to Her Britannic Majesty's Government and quoted in the Record of the first meeting of the Tribunal, it will be seen that great differences exist between them; the latter contains scarcely any data on the true summit of the Cordillera and its western slope, and there are many important omissions and errors in the eastern one. The Chilian map has been drawn to support the Chilian Expert's assertion that the main chain of the Cordillera, formed by "the highest summits which divide the waters," is situated where the continental divide occurs; and as the Chilian assistants, in making their surveys, have always been under the impression that the boundary must be traced along that divide, they have limited their work to its neighbourhood, without taking into account the Cordillera de los Andes, as is shown in pages 352 to 353. The Chilian map, therefore, does not give any idea of the geographical conditions of the ground where the correct boundary line must be sought.

With regard to the vicinity of Lake Nahuel-Huapi, it is important to compare the map of the Chilian Commission, reproduced in Plate LXIII., with the corresponding part of Map IV. The former does not afford anything like an exact idea of the features of the ground where the Chilian line is proposed to pass, and the western region, where the true line must run, is not shown at all;

the latter supplies this omission, and shows how accurate is the Argentine interpretation of the Treaties in that section, the illustrations on pages 741, 742, 746 and 751, and Plate LXI., contributing to that demonstration. The extraordinary geographical error, in consequence of which the swamp between Lakes Gutierrez and Mascardi, where the Chilean line runs, is converted into a main chain, is shown in the two maps, as well as in the sketch on page 754. The longitudinal depression to the east of the foot-hills of the Cordillera, between this and the Pre-Cordillera, is represented from Nahuel-Huapi to Lake Puelo in the Map, in the photographs shown in Plates LXI., LXII. and LXV., and in the figures on pages 757-761 and 764. They illustrate the topography of that region, dispelling any doubt as to the justice of the Argentine claims, and confirming, at the same time, what the Argentine Expert has said as to the location of the main or central chain of the Cordillera to the west of that longitudinal depression.

In the Map is clearly visible how erroneous are the assertions of Señores Fischer and Steffen, as to the existence of a high snowy ridge to the east of the valley of Epuyen and Cholila (see Plates XV., XVI., XVII. and XXV.). The Chilean Representative has told the Tribunal that Dr. Steffen "is known to be one who does not make statements that cannot be verified as accurate"; but in the present instance, at any rate, he is in error, as is shown by the Map, by Plate LXVIII. Fig. 1, and by Plate LXXII. The Map also shows the general result of the Argentine surveys of the river Bodudahue, and of the summit of the Cordillera, a result which confirms the opinions of the Chilean geographers, Señores Vidal Gormaz (figure on page 127, and Plate I.), Krüger and Stange on the location of that summit. Those opinions are opposed to the views of the Chilean Expert, and to the map of Señores Fischer and Steffen, already referred to, as they corroborate the existence of low plains and independent broken ridges where the Chilean Expert places the main chain of the Andes forming the continental divide.

As regards the system of eastern lakes—the southern continuation of the series quoted by Dr. Steffen, from Nahuel-Huapi to the north—the Map disproves the Chilean Expert's pretension as to their situation to the west of the main chain, and supports (with Plates LXVIII. Fig. 2, LXIX., LXX. Fig. 2, and LXXI., and figures on pages 781 and 795) the Argentine claim.

In Map IV. is seen, between the eastern foot-hills of the Cordillera and the Pre-Cordillera, the exact geographical situation of the Colony 16 de Octubre,



which the Chilian Expert attempts to include in Chilian territory, as is also seen the region to the east of the Pre-Cordillera where he locates his boundary line, in the constantly changing continental divide, which occurs in the Plain of Esguel and Súnicaparia. This region is represented in Plates LXXII. to LXXIV. Fig. 1, and furnishes further proof of the inconsistency of such a pretension, while the plates and figures quoted before, and those on pages 812, 817 and 819, as well as Plate LXXIV. Fig. 2, all support the Argentine line.

Some blanks exist in the mountains where the ground has not been explored, but it is not hazardous to assert that once the zones are surveyed there will be found high mountains, which will enlarge the formidable barrier, represented now in such an incomplete manner, owing to the short time available for these surveys, so persistently opposed by Señor Barros Arana.

*Maps V. and VI.*—Scale 1 m. : 500,000. Show the ground described in Chapters XXIII. and XXIV. The same observations, as regards the differences existing between Map IV. and the corresponding part of the map of the Chilian Boundary Commission, apply when comparing Map V. with the Chilian map of the same sections. The boundary between Argentina and Chile runs along the mass of the Cordillera de los Andes, and it is impossible to pretend to carry that boundary to the wide eastern valleys, under the sophistical pretext that the line must be traced within the “Andean system,” which is a vague, meaningless expression. Maps V. and VI. will at once show that the attempt to convert the frontier stipulated in the Treaties—i.e. the Cordillera de los Andes—into the ambiguous “Andean system,” is intended to give a semblance of a legal basis, without however the slightest consistency, to this part of the line proposed by the Chilian Expert and rejected by the Argentine Expert. In fact, the impossible task of presenting as coincident the hypothetical “hydrological main chain of the Andes,”—that is to say, the South American continental water-parting—with the actual main chain of the Cordillera, and even with the Cordillera itself, answers the purpose of making admissible the arbitration on the Chilian line, since only the differences between the Experts when planting the landmarks within the Cordillera could be submitted to Her Britannic Majesty’s Government. Extensive, high, impassable masses of rock and ice command, in Map V., the western and eastern sides of the range. The narrow strip of land that, according to the Chilian geographers, constitutes Chile, descends abruptly to the Pacific Ocean, cut by deep fjords which break the western lateral mountain ridges; to the north, between the eastern slope of

the Cordillera and the Pre-Cordillera, extend the Argentine colonised valleys of 16 de Octubre and Carrenleufu, which the pretended boundary line on the "hydrographical Cordillera" tries to include within Chilian jurisdiction; to the centre spread out the plains, deeply carved into valleys and glens, which do not alter the general features, bounded far to the east by unimportant small ridges, having no connection with the Cordillera; to the south reappears the Pre-Cordillera, separating the plains from the deep transversal depression where Lakes La Plata and Fontana are situated; and to the west, at the foot of the Chilian slope of the Cordillera, lies the Colony of Palena, which is the unique Chilian attempt to colonise those lands, and which in 1899 was so uninhabited that, according to Mr. Anderson Smith, who visited it, its population was reduced to the crew of an open boat.\* Map VI. shows the details of the carving of the plain referred to, where the erosive action and the glacial material have produced a complicated and changeable drainage; in this confused divide the Chilian Expert locates the *hydrographical main chain* of the Andes, and he proceeds thus for it is impossible to find there the orographical natural main chain. The two maps also show that the Chilian explorers, Señores Steffen and Fischer, stated the truth when they said that, during their journeys from the south to the north, they saw the Cordillera de los Andes rising far to the west, while they were travelling in more or less undulating plains (pages 856 and 857).

The figures on pages 400 and 401, which cannot be rejected by Chile, being accurate reproductions of those published in Chilian official documents, represent the mountains of the Cordillera ice-capped as they really are, and the region of the imaginary *hydrographical Cordillera* where only plains are to be seen, thus confirming the Argentine Expert's affirmations on the true geographical situation of the boundary range, and proving the impracticability of the theoretical ideas of the Chilian Expert. These conclusions are still more evident if comparison is made between Plates VI. and VII. of this Report, Plate VII. being a panorama of that plain, showing the erosive action and the morainic accumulations in a flat ground, where the uninterrupted *line of crests of the Andes* which divide the waters of the South American continent to which the Chilian Expert refers, would be looked for in vain.

The figure on page 827 refutes the assertion of the Chilian geographers,

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\* Anderson Smith, *Temperate Chile*, London, 1899, p. 147.



with a document of their own, that all the sources of the river Palena are within the Cordillera ; supports the opposite view of the Argentine Expert, and confirms the details of the northern part of Map V., disproving the existence of the water-parting chain, which the map of Dr. Steffen, inserted on page 831, depicts. The figure on page 837 represents one of the natural landmarks proposed by the Argentine Expert in the main chain of the Andes, and the figures on pages 838, 840 and 841 and Plates LXVII. to LXXXII., show that, while higher mountains exist to the west of the sources of the river, there extends from Lake Paz towards the east a wide alluvial plain, having no important elevations, which is also proved by Plates LXXXIII. to LXXXVII., where are to be seen the hills considered by the Chilian Expert as the "highest crests of the Andes which divide the waters," i.e. the basin of the Carrenleufu from that of the Tecka river. Plates LXXXVIII. to CII. represent, far to the east of the Cordillera, the little ridges and hills which the Chilian geographers include within their elastic "Andean system," and the more or less eroded plains between the eastern foot-hills of the range and those hills. A glance at the said plates, and the figures on pages 864, 866 and 867, will suffice to destroy the arguments advanced by the Chilian geographers, Expert and Representative as to the satisfactory character of the line they support, while Plates CIII. to CVI., and figure on page 871, demonstrate the accuracy of the Argentine Expert's line and his faithful fulfilment of the Agreements. The diagram on page 872 once more contradicts the Chilian Expert's assertions as to the regularity of his line and the wandering of the Argentine one.

*Maps VII. to IX.*—The greater part of the region represented in these maps had not been surveyed until 1898 by the Chilian Boundary Commission, whose work had been confined to the region of the continental water-parting to the south of Lake Buenos Aires, as becomes apparent from the examination of the Chilian map presented to Her Britannic Majesty's Government. This map reveals the insufficiency of Chilian data at the disposal of Señor Barros Arana when he proposed his boundary line, stating that it ran along "the highest crests of the Andes which divide the waters." Maps VII. to IX. also furnish conclusive proofs of the soundness of the reasons that induced the Argentine Expert to reject such a line, and to propose another running in the main or central chain of the Andes.

The sketch map of Señores Steffen and Fischer, reproduced in Plate XVII., is the most important of the Chilian geographical documents used by the Chilian Expert, when tracing his line to the east of the river Aisen and its tributaries ;



and while it contradicts the statements of these two Chilian explorers as regards the orography of that region, it is in accordance with the corresponding Argentine maps, as it does not depict any lateral ridge of the Cordillera forming the continental divide. The sketch, perhaps, helped Dr. Steffen in the drawing of his map reproduced in Plate XXV. The drainage of the region where the continental divide occurs, as depicted in Maps VII. and VIII., has been well surveyed by the Argentine Commissions, as the general features of the ground admit of rapid work, being constituted by plain tableland and isolated hills of easy access, while the Andean mass, cut by the main branch of the river Aisen, has not been surveyed in detail, for this would have required much time and great expense. Moreover, the imposing mass of the usually impassable snowy Cordillera, crowned by huge high peaks, offers conspicuous points—forming so many natural landmarks—enough to determine a general frontier line like that contemplated in the Record of May 1, 1897. It must also be stated, that the physical conditions of that mountain range would render unnecessary in this region the detailed marking out of the boundary, at least until a dense population, which could easily exist in the eastern or Argentine side, has settled there. The Argentine Expert has considered that the landmarks planted at the points where the line cuts the rivers flowing from the east towards the west would be sufficient to fix the frontier along the Cordillera to the south of 41° S. lat.

In Map VII. the source of the river Huemules is depicted to the east of the Cordillera, a fact which was not known in 1898, and which offers another case of intersection of the range by watercourses; to the south of that river exist unexplored high ranges, covered with immense glaciers flowing down the two Andean slopes, which form the true watershed of the Cordillera. The longitudinal eastern depression running from Lake La Plata towards the south is represented by the valleys of the rivers Mañihuales and Murta, Lakes Buenos Aires and Soler, and the river Las Heras; the blocks of the Pre-Cordillera appear isolated, as they are independent of the great range; to the east lies the secondary depression between these blocks and the tableland, and its general character as eastern Andean plains is very apparent. The intermediate area where the tributaries of the rivers Aisen and Mayo rise, shown in Map VIII., together with the drainage of the tableland and the transversal depressions, confirms the views of the Argentine Expert as to the level character of the ground where the Chilian Expert pretends that the continuous main chain of the Andes rises. Map IX. contains a representation of the morainic transversal

depression between Lake Buenos Aires and the river Deseado, and of the normal dependency of its waters to the Atlantic, practically demonstrated by the Argentine Expert's experiment of rectifying the course of the river Fénix. It further shows that the Chilian Expert is in error when maintaining that to the east of the bend of that river, in the marshes of Pariaiken, and in the foot of the southern tableland, the Cordillera de los Andes, with its line of "highest crests that divide the waters," is to be found.

The illustrations in Chapter XXV., and in the first part of Chapter XXVI., corroborate what is shown in Maps VII. to IX. Plate CVII. represents the Cordillera where the two boundary lines approach one another, and where a settlement would have been easy if the Chilian Expert's theory had not prevented him from fixing the boundary within the true Cordillera. Plate CVIII. contains the southern hills and mountains which approach the Cordillera, and along which the Chilian line runs to the east towards the plains where the continental divide occurs. These plains are shown in the figures on pages 882 and 887-889 and in Plates CIX. and CXI. to CXV. The Chilian line wanders there entirely outside the region where the boundary must be located according to the Treaties, and encroaches upon Argentine territory which never was claimed by Chile after 1881. Plate CX. and the figures on pages 895-899 show the snowy Cordillera, where that boundary must be traced, leaving to Argentina the valley of the upper river Aisen, as it is situated to the east of the Andean summit. The same remarks apply to Plates CXVI. to CXIX., and to the figures on pages 902, 908, 910, representing the tableland and the morainic landscape to the east of Lake Buenos Aires, where there are no ridges at all.

Plate CXXI. and the figure on page 917 show the intermediate depression between the tableland and the Pre-Cordillera; Plate CXX. the Pre-Cordillera, and in the foreground the Cordillera with its line of snowy, serrated peaks, where the Argentine line runs; and the figures on pages 912-916, the base of the Cordillera commanded by the snows of its eastern ridge. The abnormal drainage and the continental divide are very secondary features when compared with the excellence of that high summit. The two proposed boundaries are shown in the three maps and in the plates and figures quoted, as it has been considered that the natural features of the country are of the greatest value in supporting the Argentine claims derived from tradition and the Treaties.

*Map X.*—On a scale of 1 m. : 500,000. Comprises from 47° to 49° 30' S. lat., and includes the region where, according to the Chilian Expert, *the geographical*



*location of the boundary line in the Cordillera is completely unknown*, as he stated to his Government, in 1898, at the very moment when the Experts officially declared that they were ready to discuss the boundary line. The Argentine Expert, at the meeting of May 14, 1898, which took place at the office of the President of Chile (see page 343), proved that this ignorance was only on the part of the Chilian Expert, as he on his part had sufficient geographical knowledge of that section : leaving thus to the responsibility of his colleague a declaration according to which the latter, whilst believing that it was "*impossible to mark out a boundary line in a map, even approximately*" in that region, stated at the same time that *the line he proposed fulfilled the stipulations of the Boundary Treaties.*

It is in vain that the Chilian Expert and his assistants have made every effort to bolster up his assertion that his boundary line combines the required conditions. A simple glance at the sketch of the region will show the opposite to be the case, and the Argentine map leaves no room for doubting the incorrectness of the Chilian line. The general features of the ground between Lake Buenos Aires and Lake Belgrano are much the same as in the zone where the rivers Carrenleufu, Pico, Frías, Goichel, Coyaiken and Aisen rise, and as in the eastern region of Lake Buenos Aires. No mountain ridges whatever nor "passes" exist there ; there are only the tableland and the hollows of dried-up lakes and rivers. In the region of the Tecka, Ecker, Gio, Blanco and Olnie streams, there are the secondary depressions between the tableland and the Pre-Cordillera, as well as the remnants of the former extension of the lakes still existing to the west. There the Pre-Cordillera is also broken, giving passage to the eastern waters by rivers or lakes fed by the snows and rains of its ridges, such as the rivers Tamango, Tarde and Pueyrredon, and Lakes Pueyrredon, Posadas and Brown. There exists also a longitudinal tectonic depression which separates the Cordillera from the Pre-Cordillera, containing other lakes and rivers, such as Lakes Azul, Negro, Sorpresa, and the great river Las Heras and its western affluents, Pista, Ventisquero, etc. ; and, finally, to the west, there also rises majestically the crest of the snowy Cordillera, impassable with its rugged rocks and glaciers, all striking features that were ignored by the Chilian Expert when, in the Record of August 29, 1898, he defined his line thus :—

"The No. 324 opening of Gillo and the 325 stretch of high tableland and mountain ridges separate the waters that flow into the Cochrane Lagoon, and into two nameless lagoons which are probably drained by Baker's Channel in the Pacific, from the Argentine streams Gillo and Olnie that run towards the Atlantic."



This "tableland and mountain ridges" do not belong to the Cordillera de los Andes, as the Chilian Expert declared to be the case, nor to the Pre-Cordillera. The opinion of so competent an authority as Mr. Hatcher, quoted at page 921, is against this geographical interpretation, and facts show that that "tableland" and those "mountain ridges" are far away from the boundary region, and hence outside the Arbitration. Map X. likewise shows the inconsistency of the Chilian line, so vaguely described in the following words :—

"Number 326, unnamed Cordillera, separates the waters of the slopes from which run the Chilian rivers that probably flow into the Pacific through Baker's Channel, from the slopes where begins the Argentine river Corpe or Chico which flows to the Atlantic.

"Points 327 to 329 separate the waters of the affluents of lagoon Tar and Lake San Martín, which empty into the channels of the Pacific, from the affluents of the Argentine Lake Obstáculo.

"Number 330, a stretch of Cordillera, that separates the waters forming the Argentine stream Chalia from the slopes down which flow the tributaries of Lake San Martín, which empty into the channels of the Pacific."

This "unnamed Cordillera" does not exist, and those who have reported that it does to the Chilian Expert have doubtless been mistaken, inasmuch as the Chilian assistants did not approach that zone until 1898, the data on the probable course of the rivers flowing to the Pacific having been taken from Argentine information. The Chilian map reproduced on Plate XXI. confirms this assertion; Señor Bertrand's route map shows the whole region as "unexplored," and none of them, nor the Chilian map on a scale 1 m. : 1,000,000 presented to Her Britannic Majesty's Government, contain any mention of "the highest crest of the Andes which divides the waters," stated to exist there by the Chilian Expert in the Record of August 29, 1898. The Argentine map, presented to Her Britannic Majesty's Government on the same occasion as the Chilian map, shows, on the contrary, the true features of that region, which are the same as in the north, between the tableland to the south of Lake Buenos Aires, and the tableland to the north-east of Lake Belgrano. With the exception of the short stretch to the south of Lake Belgrano and to the north of the river Mayer, where the continental divide is produced in the Pre-Cordillera, there are no mountains to the east of that divide, which occurs in the tableland in the hollows of the old dried-up lakes.

In that "unexplored" region Lakes Volcán, Belgrano, Aisen, Nansen, river Mayer and Lake San Martín exist, all of them to the east of the Cordillera, their

waters reaching to the east of the Pre-Cordillera, towards the Patagonian plains. The illustrations corresponding to these zones likewise confirm what has been said against the Chilian Expert's line. The so-called "high tableland and mountain ridges" are represented on Plates CXXII. to CXXXIV. ; this Patagonian landscape does not show at the points referred to by Señor Barros Arana the slightest indication of a mountain ridge, and there are to be seen only sands and gravelly plains, occasionally covered by lavas, and deeply furrowed by erosion. Further south, Plates CXXII. Fig. 2, CXXVII. Fig. 1, CXXVIII., CXXIX. Fig. 1, CXXX. Fig. 2, CXXXI. Fig. 1, and figures in pages 928, 938 and 939, show the same features.

Plates CXXV., CXXVI., CXXVII. Fig. 2, CXXIX. Fig. 2, and figures in pages 933, 934, 935, 936 and 938, represent the lacustrine district, the eroded valleys to the east of the hills at the foot of the Pre-Cordillera and the transversal depression in part occupied by the lakes, while Plates CXXX. Fig. 1, and CXXXI. Fig. 2, and figures in pages 925, 926, 927, 930, 931, 937, 940 to 945, indicate the Cordillera, ice-capped and rugged, and also impassable, as has been ascertained by the Chilian explorers themselves.\*

All the features over which the Argentine Expert traces his line combine the conditions required by the frontier, but such is not the case with those determined by the Chilian Expert ; none of those conditions are to be found in the Nos. 322 to 330 of his line.

*Map XI.*—Scale 1 m. : 500,000. This Map comprises the Patagonian zone between 49° 30' and 52° 20' S. lat. It shows the two boundary lines agreeing from the latitude of Mount Fitz-Roy to that of Mount Stokes, for in this stretch the continental divide and the main chain of the Andes appear to coincide.

Huge glaciers render that part of the Cordillera impassable, and there no difficulty should ever arise in the future as to the boundary. In this part the divide does not show the abnormal conditions presented from 38° to 49° 30' S. lat. : all the waters of the eastern slope of the Cordillera flow down to the

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\* In the Chilian maps Lake Pueyrredon bears the name of Lake Cochrane, but this lake having been discovered and named by the Argentine surveyors before its existence was known to the Chilians, the first name must be accepted. Calen Inlet, likewise, bears in the same map the name of Canal Baker. The name of Calen Inlet is assigned in the "Derrotero del Estrecho de Magallanes, Tierra del Fuego y Canales de Patagonia," published by the Hydrographic Department of Chile in 1891 (p. 309), the name of "Canal Baker" having only appeared in 1898. When comparing the Argentine and Chilian maps it will be observed that many names are not the same, and therefore it is necessary to state that all the Argentine names were published and mapped before the Chilian Explorers had any knowledge of the ground.



Atlantic, with the exception of those of the northern flanks of Mount Stokes, these waters running abnormally to the Pacific, as can be seen in the Map, where the eastern slope of the Cordillera is clearly depicted. In the Map is also represented the bend of the Chilian line from the continental divide which occurs at the terminal depression to the east of Lake San Martín, to Mount Fitz-Roy; the north and south line as far as Mount Stokes, and the line which from that point runs to the east following the same divide. This bend once more demonstrates the difficulties experienced by the Chilian Expert in trying to harmonise his hypothetical main chain of the Andes with the true one.

Had the present outlet of Lake Argentino, formed by river Santa Cruz, been to the west, as is the case with Lake San Martín, etc., the pretended summits of the Andes of the Chilian Expert would have been found right down to the south as far as parallel 52° S. lat.; and if the change in the drainage of Lakes La Plata and Fontana, now in course of execution, were already effected, the Chilian Expert's highest summits would be traced parallel to the east of the Cordillera de los Andes in the Patagonian plains. This attempting to determine the crest of mountain ranges without any other guidance than the direction followed by springs; this way of considering the Cordillera de los Andes as merely a broken chain of secondary importance, for the simple reason that it does not form the continental divide; and this effort to convert depressions and plains into important mountain ranges, because that divide does happen at the present time to abnormally exist there—are unprecedented cases in geographical description, and sufficient therefore to demonstrate the absurdity of the Chilian Expert's line.

The southern part of Map XI. leads to the question of the intersection of the Cordillera de los Andes by waters coming from the Pacific, referred to in Article II. of the Protocol of 1893 and Article III. of the Agreement of 1896; it shows how erroneous is the statement of the Chilian Expert contained in the Record of September 1, 1898, and that there are no mountain ridges to the east of Disappointment Bay; it also proves how accurate were the observations made by Ladrillero, Skyring, Kirke, Rogers, Ibar, Steinman, Bertrand and Norden-skjöld, upon the non-existence of the Cordillera at the very part where the Chilian Expert wishes to locate the highest summits that divide the waters. The drainage of the whole region to the east of the Cordillera, and part of the present tableland and natural depression towards the Pacific, is an abnormal feature which does not alter the normal scientific watershed of the Cordillera in its main chain, this



region draining towards the Atlantic, as the sloping down of the ground is uninterrupted by any mountain ridge to the east of the Andean summit.

In the Map are likewise represented the boundary line settled in the neighbourhood of the Straits of Magellan, and the line proposed by the Argentine Expert to the north of 52° S. lat., in order to leave to Chile the coast of the channels that he considered situated to the west of the Cordillera. A simple comparison of these two lines will make it clear that both combine the same conditions as have been set forth in Chapter XXVII. The Chilian line, on the contrary, encroaches upon Argentine territory to such an extent as to carry with it its own condemnation.

Plates CXXXII., CXXXIII., CXXXIV., CXXXVI. and the figure on page 973, represent the Cordillera de los Andes; Plates CXXXV. to CXXXVII. and the figures on pages 970, 971, 973, 974 and 983 show the intermediate region of lakes and hills; while Plates CXXXVIII. to CXL. and the figures on pages 966 to 969, 975, and 978 to 981 show the plain and tableland where the Chilian Expert has located the highest crests of the Andes which divide the waters. It is unnecessary to draw further attention to the erroneous character of such an affirmation in the presence of such unimpeachable documents.

#### 4. OTHER MAPS.

*Map XII.* has been prepared in order to show the situation of the transversal sections which have been described in Chapter XXVIII.

*Map XIII.* comprises the regions represented in the photographic panoramas produced in the course of this Report.

*Map XIV.*—In Sheets A, B, C, D the present geographical knowledge of the zones to the south of parallel 39° S. lat. is contained. This Map has been drawn with the aid of Argentine documents, with the exception of the courses of the rivers Cochamó, Puelo, Manso, Yelcho, and parts of the rivers Cisnes, Aisen, and Las Heras; the regions to the west of the high summit of the Cordillera de los Andes and the western coast line have been taken (excepting Calen Inlet and the inlets immediately to the south, which have been drawn from Argentine documents) from the charts published by the British Admiralty. This Map determines with sufficient clearness the fairness of the boundary line proposed by the Argentine Expert along the summit of the Andes, retaining under the

control of the Argentine Republic all the lands that she inherited from Spain, and which the Treaty of 1881 declared as belonging to her dominion ; these lands, which are rapidly developing under Argentine activity, extend to the east towards the Atlantic, and to the west gradually ascend without encroaching upon Chile, since the huge ice-covered Cordillera rises in the background.

The Map shows, besides, how unnatural, geographically, politically and economically considered, is the line of the Chilian Expert, drawn in forgetfulness of the limit of tradition and of Treaties, so that it descends eastwards, leaving to Chile extensive land under Argentine control, that can never be Chilian as it would be contrary to the Treaties, which cannot be suppressed, and in virtue of which the Argentine-Chilian boundary must be within the Cordillera de los Andes, along the summit of its main or central chain.

## CHAPTER XXX.

## CONCLUSION.

THIS Report contains what in the opinion of the Argentine Government may serve to facilitate the task of the Tribunal, and of the British Commission which will survey the ground in accordance with the Agreement of April 17, 1896, when both Governments wisely stipulated that the Arbitrator, before arriving at a decision, was to appoint the said Commission in order to examine the region where differences have arisen between the Experts "when fixing in the Cordillera de los Andes the boundary marks south of parallel  $26^{\circ} 52' 45''$  S. lat."

The Argentine Government consider :—

1. That the explanation of the Treaties of 1881 and 1893, as well as of the Agreement of 1896, have been amply given, whether as regards their letter or their spirit, showing likewise the justice with which the Argentine Expert planned his general boundary line, and the good reasons he had for rejecting a considerable length of the line proposed by his colleague.

2. That it has been demonstrated that the submission of the differences to Arbitration only became possible when the Chilean Government made the indispensable declaration, that their Expert maintained that the line proposed by him was situated within the Cordillera de los Andes, inasmuch as, according to the Treaties, it is only *within* that Cordillera that differences can arise in the tracing of the frontier line, the regions to the east of, and outside the Cordillera de los Andes, having always been rightly under Argentine control, and therefore under unquestionable Argentine sovereignty.

3. That it has likewise been demonstrated that they only agreed to submit to Arbitration the differences between the Experts, in deference to the Government of Chile, as a proof of the righteousness of their claim, and confident in their chosen Arbitrator ; though they consider the information upon which the Government of Chile have based the defence of their Expert's



line, as well as their declaration that it is situated in the Cordillera de los Andes, as defective and erroneous.

4. And, finally, that this Boundary Question admits of a simple and easy decision if only there be taken into consideration the Treaties, the true political interests of the two countries, the tradition of centuries, and the geographical features.

The operation of tracing the Argentine-Chilian frontier by means of the most suitable natural features that a Nation can desire, and which could not be improved upon, has been complicated through a want of clear understanding on the part of those commissioned by Chile to draw the said frontier. The tendency to encroach upon Argentine territory has given rise to geographical and political theories which the Argentine Government energetically rejected, as they were resolved to admit no discussion whatever upon points affecting the National honour, such as those referring to claims over regions submitted to their sovereignty by Nature and by binding Treaties. The clearest demonstration has, at the same time, been given of the inconsistency of such theories, and of what little ground the Chilian Expert had for the difficulties he raised from 1890 to 1898, and for proposing such an unnatural frontier over those points impugned by the Argentine Expert, which form the only matter of the Arbitration.

The Argentine Republic and Chile inherited from Spain the territories lying to the east and to the west of the summit of the Cordillera de los Andes, towards the Atlantic and towards the Pacific respectively. This division was imposed by the orographical wall, formed by the intersection of the Cordillera slopes, which the first conquerors crossed on their way to the south from Perú; that "*Cordillera Nevada*" was recognised during the Colonial Epoch as the arcifinious boundary between the eastern and western dependencies of the Crown, the encroachment of Chile into the Cuyo Provinces being only temporary and contrary to the administrative and commercial interests of that region. When Diego de Almagro crossed the Cordillera de los Andes, in 1535, he stated that the country which extends to the western side of the range was Chile ("*Provincia de Chile*"). Chile, properly so-called, has been ever since that time bounded to the east by the "*Cordillera de la Nieve*" (Cordillera of the snow) or "*Cordillera de los Andes*," "*the great Cordillera Nevada de los Andes*," and to the west by the Pacific Ocean or Southern sea, while the province of Cuyo is situated "*on the other side of the great snowy Cordillera*." This "*Cordillera de Sierras*" (range of ridges) "*so rugged as to form an impassable barrier for the horses*"—to use Almagro's

words—this range, forming an excellent natural boundary, was considered as such by the historians of the Colonial Epoch of Chile; amongst others by Rodrigo de Quiroga, who calls it a “*very lofty snowy Cordillera*,” Luis Tribaldos de Toledo, “*a snow-covered Cordillera and mountain range, it being impossible to traverse it in many places*,” Alonso de Góngora Marmolejo, “*the Cordillera Nevada*,” “*snow-covered during the entire year*,” Pedro de Córdoba y Figueroa, “*the famous Cordillera, only passable during six months of the year and inaccessible during the remainder*,” Miguel de Olavarria, “*the highest snow-covered Cordillera*,” “*forming a wall . . .*”; Alonso Gonzalez de Nájera, “*a very lofty range of mountains*,” “*the great snow-covered Cordillera, which on the eastern side of all that Kingdom constitutes an impregnable wall*,” Lorenzo del Salto, “*the great Cordillera Nevada*,” Alonso de Ovalle, “*the famous snow-covered Cordillera*,” Diego de Rosales, “*the great Cordillera Nevada de los Andes*,” Alonso de Solórzano y Velasco, “*the snow-covered Cordillera*,” “*the Cordillera of Chile*,” “*a wall of superb mountains*,” Jorge Juan and Antonio de Ulloa, “*the lofty Cordillera*,” Pedro Lozano, “*the famous Cordillera Nevada . . . a wall of such lofty dimensions*,” Miguel de Olivares, “*the Cordillera Real de los Andes*,” “*the great Sierra*.” Alonso de Sotomator states that, “*the Cordillera Nevada separates the provinces of Paraguay and Chile*,” Francisco Caro de Torres, that “*the snow-covered Cordillera*,” separates the provinces of Paraguay and Chile; José Perez García refers to the range as “*the lofty snow-covered Cordillera*,” Joaquin de Villareal, “*the snow-covered Cordillera*,” Ignacio de Molina, “*the Cordillera, which forms an insurmountable barrier on the land-side*,” etc.

All these historians considered as “Chile” the region between that impassable wall and the wide sea to the west; and the Spanish kings confirmed, on different occasions, the Andes as the eastern boundary. King Carlos II., in 1684, spoke of “the Cordillera Nevada which divides Chile from those provinces (Río de la Plata) and from Tucuman;” and Carlos III., in 1776, constituted the “Virreinato del Río de la Plata,” in such a manner that the natural boundary of the snowy summit of the Andes should be the frontier between the Great Southern Dependencies of the Crown. Chile was, for the statesmen, historians and geographers, before 1810, confined between the two efficient natural and satisfactory boundaries: the crest of the snowy range and the ocean, “like the scabbard of a sword, narrow and long”—a general feature which is still mentioned in the recent Chilean official reports. When the War of Independence broke out, Chile continued to be considered as situated to the west of the Andean summit, the Chilean documents of that epoch stating that the Argentine army crossed the



Andes to enter the Chilian territory in order to free it from the Spaniards. Henriquez spoke of the boundary as "*a geographical truth presenting itself to the eye;*" "*Chile being shut in as within a wall and separated from other peoples by a chain of very lofty mountains covered with eternal snow;*" Egaña, Mackenna, and Samaniego call it a "*formidable barrier,*" etc.

The Government of the United States having, in 1817, sent a Commission to investigate and report on the state of matters in South American countries during that war, the Commission pointed out as the boundary between Chile and Argentina, the "*Cordillera de los Andes,*" its "*crests,*" and the "*loftiest crests of the Cordillera de los Andes*" as far as Cape Horn. This was "the natural boundary" of the Chilian Constitutions of 1822, 1823, 1826, 1828 and 1833. From Atacama to Cape Horn, Chile, according to these Constitutions, was bounded to the east by the summit of the Cordillera de los Andes. To those limits reference was made in the Treaty with the Argentine Republic of November 20, 1826, according to which both countries engaged themselves "to guarantee the integrity of their territories, and to take action against every foreign Power which shall attempt to change by force the boundaries of the said Republics, as recognised before their emancipation, or subsequently, in virtue of special Treaties." Chile comprised "all the territory which extends from the Desert of Atacama to Cape Horn, and from the Cordillera de los Andes to the Pacific Ocean, with the Archipelago of Chiloé and of the Islands adjacent to the coast of Chile," as is stated in the Treaty made by Chile with Spain on July 1, 1846, in which Spain recognised as Chilian only the territory forming the "Capitanía General de Chile," bounded on the east by the traditional natural boundary, i.e. the snowy summit of the Cordillera de los Andes.

During the War of Independence the Chilian Generals stated that "*Nature had given to Chile in the majestic range of the Andes a natural fortification, which, from its great extent, is unique in the world,*" and that "*the country is enclosed on all sides by impregnable barriers.*" The views that prevailed in colonial times are the same as those of to-day.

Schmidtmeyer, Miers, Caldeleugh and Head, who travelled in the early days of the Republic, fixed the eastern boundary of Chile along the summit of the Cordillera; Charles Darwin determined the true lateral limit of the range and its central chain, and Gilliss adhered to his view, both having personally visited the region. Hundreds of books have repeated the statement that this boundary is the natural and true one; and geographers in the service of Chile, such as Gay,



Pissis, Domeiko, Asta-Buruaga and Philippi, published official works confirming the traditional line and the features of the Cordillera in accordance with Darwin's opinions. Gay referred to the "*immense Cordillera*" as the boundary; Pissis said that the *anticlinal line of the Andean Cordillera* forms the same boundary; Domeiko added that Chile extends between the Pacific and the Andean watershed, which, he admits, is traversed by the rivers coming from the east; Asta-Buruaga defined the character of the principal chain that forms the boundary; and Philippi confirmed Domeiko's statement as to the Andes being cut by waters coming from the Patagonian plains or from the eastern slope of the Cordillera. Chilian statesmen, such as Rosales, Vicuña Mackenna, Perez Rosales, Lastarria, Amunátegui and Matta, corroborated that the geographical and political frontier is "*along the summits or crests of the range,*" in "*the lofty Andes;*" in "*the culminating line of the Andes;*" in "*the great chain of the Andes;*" in that "*colossal bulwark,*" the "*gigantic Cordillera;*" the "*colossal barrier,*" i.e. "*the real or ideal line of the summit of the Andes.*" And, finally, Señor Barros Arana, historian and geographer, taught the Chilian students that, "Chile is formed by a narrow strip of uneven and mountainous territory, which stretches from north to south, *west of the Great Cordillera de los Andes*, from lat. 24° S., that is to say, from the Desert of Atacama as far as Cape Horn;" that, "the width of this strip of territory varies from 150 kilometres, at lat. 33° S., to 180 kilometres at lat. 38° S.;" that, "still further south the territory becomes much narrower, the ocean penetrates into the land, forming numerous islands, *until it bathes the foot of the great Cordillera;*" that the Cordillera is "*formed by rugged mountains, abrupt ravines, declivities streaked by stratifications of variegated hues, numerous volcanic cones, jagged crags, and inaccessible summits lost in the region of eternal snow;*" and that "*the culminating line of the Andes, where trees and bushes disappear, and on the highest ridges of which the snow never melts, is the one constituting always a barrier between Chile and the Argentine Republic, only broken by narrow and majestic defiles.*"

Official boundary documents of Chile have recognised as her eastern limit "*the crest of the Andes,*" or "*the anticlinal line of the Andes*" (Record of Taltal, of May 11, 1870); "*the lofty crest of the great Cordillera de los Andes*" (Protocol Lindsay-Corral, Art. 9); "*the most elevated crests of the Cordillera*" (Note of the Minister, Señor Walker Martinez); "*the highest edge of the Cordillera de los Andes*" (Decree of September 30, 1869), etc.

The official publications of Chile stated the same boundary, and the British Diplomatic Representative in Chile, in 1875, described the "narrowness" of the

territory of the country, formed by "*a strip of coast land, pent in between nearly the loftiest mountains and the broadest ocean of the globe,*" to the west "*of the giant wall of the Andes.*"

Not one of the above-quoted unimpeachable authorities can be contradicted, and all of them accept the boundary in the top of the rugged and snowy Cordillera. They being so well known in Chile, it is not an easy task for that country to justify the course which she pursued in raising difficulties when the frontier was to be traced.

That line, favoured by Chilean statesmen, historians and geographers, for over three centuries, was nevertheless broken through, in 1843, by an unjustifiable advance to the east of the Andes at the Straits of Magellan; and thus arose the Argentine-Chilian Boundary Question, which, commencing only as a geographical difference, has been rendered so complicated by the Chilian Expert's theories that, in spite of the efforts made on the Argentine side to settle it in harmony with the interests of both countries, it has now lasted for nearly sixty years.

For Chile, as well as for the Argentine Republic, the summit of the Andes was the line of separation between the two countries; for both, the watershed of the Andes was synonymous with the highest crest of the Cordillera de los Andes; for both, it was a fact that the range and its watershed were cut, not only by rivers flowing from the eastern slope, or from the plains to the Pacific Ocean, but by inlets and channels, such as the Straits of Magellan, as was proved before and after that epoch by the explorations of Ladrillero, García, Skyring and Kirke, Cox, Frick, Vidal Gormaz, Simpson, Musters, Rogers, Ibar and Moreno. However, after the encroachment of 1843, Chilian statesmen deemed it advisable, in the interests of their country, to put forward claims to the territories lying to the east of the summit of the Cordillera, doubtless thinking that by asking much they might obtain something—the difficulties in the way of fixing the Andean frontier thus increasing in proportion to the growth of Chile's pretensions. This tendency was clearly revealed in a letter addressed by the Chilian Minister for Foreign Affairs, Señor Alfonso, to the Chilian Plenipotentiary at Buenos Aires, Señor Barros Arana, dated October 1, 1876, where it was said: "I have always considered that we must claim all Patagonia, only to surely obtain the complete possession of the Straits. Our geographical situation, and our interests, doubtless indicate that we must not advance towards that side. But the question is



already formulated, and we must insist on it in the terms of the last discussion." \*

In consequence, the first difficulty was the Chilian occupation of Puerto Bulnes, on the Brunswick Peninsula, in the Straits of Magellan, and situated to the east of the Cordillera, and therefore in territory within Argentine jurisdiction, as eminent Chilian statesmen acknowledged at the time. The Argentine Government protested against that occupation, and declared to the Chilian Government:—"The great range of the Andes has bounded the territories of the Argentine Confederation, and that natural boundary has been always recognised to the Republic of Chile. The Argentine territory begins at the eastern summit of the range, which forms the boundary through its whole extent as far as Cape Horn." That is the rational boundary, respected during centuries; that is the boundary agreed to in binding covenants; that is the boundary which, the Argentine Government continues to assert, is the only rightful and the only possible one, as imposed by Nature herself, and controlling the development and sphere of action of the two Nations; that is finally the boundary which, when proposing the frontier points that have been submitted to the consideration of Her Britannic Majesty's Government, the Chilian Expert seeks to modify, thus disregarding the international advantages which should be the lot of peoples separated by such a barrier as the Andes.

The negotiations initiated in 1847 gave rise to the respective part of the Treaty of Friendship and Commerce of January 3, 1856, which confirmed the one of 1826, and ensured mutual respect for the rights of the two countries over the whole of their territories, as they existed at the time when they became independent of the mother country. The Argentine Republic bound herself to respect the title of Chile to all the territories possessed by that country in the year 1810, and, on the other hand, Chile bound herself to respect similar title to the Argentine Republic. The only difficulty therefore that could arise, according to the Treaty of 1856, would be in determining definitely what were the original limits of the respective countries, that is to say, the *uti possidetis* of 1810. The Argentine Republic relied on her title, knowing that is was clear, and the matter was limited to the inquiry as to the true geographical situation in relation to

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\* Argentine writers have several times published this letter, and in the Chilian documents which have been examined, no contradiction whatever, as regards its authenticity, has been found.



the Cordillera de los Andes, of the Straits of Magellan, and of the Colony of Punta Arenas, or Sandy Point.

The Boundary discussion was reopened in 1865. The Argentine Republic continued to contend that her western boundary from north to south was the Cordillera de los Andes, and that, in consequence, she had dominion over all the territory eastward of the Andean crest as far as Cape Horn. Chile accepted that natural boundary to a great extent, but maintained—against her Constitution, the Argentine-Chilian Treaties of 1826 and 1856, and the Treaty with Spain of 1846—that in Patagonia, and to the extreme south, the territories on both sides of the Cordillera de los Andes were Chilian from the Pacific to the Atlantic. Several solutions were attempted, and some agreed to by the Representatives of the two countries. In 1866, Chile proposed as a compromise the division of the Straits of Magellan at Gregory Bay, leaving as territory adjacent to the Colony of Punta Arenas the area included within a line prolonged from that bay to 50° S. lat., in a due north direction. To the north of that latitude the boundary would run as far as the parallel of the Bay of Reloncavi, along the eastern base of the Andes. The Argentine Government allowed no discussion on a proposal which affected a region under Argentine sovereignty, since this sovereignty commences at the crest of the Andes.

In 1872 the Representative of Chile, while recognising that, to the north of the parallel of the river Deseado (about 46° 30' S. lat.), the Cordillera de los Andes "might be, in the Patagonian lands, the eastern boundary of Chile and the western boundary of the Argentine Republic," proposed that the territory to the south of that river should be Chilian. The Argentine Representative proposed, on his part, "Peckett Bay as a point of departure for a dividing line in the Straits of Magellan, from which place the line will run in a westerly direction till it reaches the Cordillera de los Andes"—a compromise which was opposed by the Minister of Chile, holding that, though the western boundary "should be the range of the Andes, which would also constitute the eastern boundary of Chile," his Government, in view of the grave inconveniences of that division—the interior of the region being almost completely unknown—would agree to determine the frontier by "the 45° parallel S. lat. from the Atlantic to the above-mentioned range of the Andes." More advanced pretensions to Argentine territory were thus put forward.

From 1876 to 1880 new negotiations were initiated, Señor Barros Arana, afterwards Chilian Expert, being the Chilian Representative in the first attempt

at a settlement. There was then proposed as a point of division near the Straits of Magellan, Mount Dinero, the line running thence to Mount Aymond over the highest elevations of hills, and from this place along parallel  $52^{\circ} 10'$  S. lat. to the Cordillera de los Andes. The Government of Chile having disapproved of this proposal, Señor Barros Arana transmitted to his Government, in 1877, the basis of another Agreement, determining, from  $50^{\circ}$  S. lat. towards the north, the summits of the Cordillera de los Andes, "*whether fixed in the most culminating parts or in the line of the watershed,*" both expressions being thus synonymous, in his opinion. The Chilean Government objected to this proposal, but only as regards the terminal point at lat.  $50^{\circ}$ , and, in answer to their Representative, stated that, "*the only thing that could be agreed to in this respect is, that, whenever the Andes divide the territories of the two Republics, the loftiest crests of the Cordillera should be considered the line of demarcation between them.*" Señor Barros Arana, complying with these views, expressed them on May 12, 1877, with the following wording: "*The Republic of Chile is separated from the Argentine Republic by the Cordillera de los Andes, the dividing line running along its highest points, passing between the sources on the slopes that descend one side and the other.*" The Agreement containing this clause, drawn by Señor Barros Arana in conformity with the instructions of the Government of Chile, was rejected by that Government, in consequence of other clauses which did not refer to the Andean boundary.

A second attempt to settle the Boundary Question took place in 1878, Señor Barros Arana being again the Chilean Representative. This new project did not differ substantially from that above-mentioned, when referring to that frontier line in these terms: "*The Argentine Republic is divided from the Republic of Chile by the Cordillera de los Andes, the line running along its highest points, passing between the sources on the slopes that descend one side and the other.*" Any difficulties which may arise from the existence of certain Cordillera valleys, in which the line of watershed is not clear, are to be settled amicably, with the help of the Experts."

Thus the dividing line in the summit of the Cordillera de los Andes was again agreed upon by the two Governments. Chile, according to that projected Treaty, ceased to claim land to the east of the Cordillera de los Andes, north or parallel  $52^{\circ}$  S. lat., and, as a consequence, the Article that in the former proposed Agreement regulated the *status quo* in Patagonia was eliminated.

The summit of the Cordillera as the line of delimitation between the two



countries being accepted, the Argentine Government yielded as regards the southern zone, taking into consideration the situation created by the Chilian occupation of Punta Arenas, which is located to the east of that part of the Cordillera below 52° S. lat., cut by some channels leading to the Pacific.

The difficulties which prevented an agreement upon this proposed Treaty referred exclusively to the extreme south. There was no question about the boundary line in the summit of the Andes. In another attempt, an Argentine proposal, the text of which is reproduced on pages 172 to 173, stated that, "the Cordillera de los Andes is, from north to south, the dividing boundary between the Argentine Republic and Chile as far as lat. 52°, the line of separation running along the loftiest points of the said Cordillera, and passing between the sources that descend one side and the other."

In 1881, when the difficulties raised by the Chilian pretensions produced a serious crisis, the friendly mediation of the Ministers of the United States of America, in Buenos Aires and Santiago, led to the celebration of the Treaty which put an end to the conflicts.

The Chilian Minister for Foreign Affairs, referring to the Real Cédula of King Carlos II. of 1684, had said : "When affirming that the Cordillera Nevada divided them, it only stated a fact which I have not denied *and no one can contradict*, namely, that throughout the entire extent of the provinces of Río de la Plata, *the said Cordillera is its own natural division* ; but it ceases to be so where the southern limit of the said provinces exist, that is to say, along the entire extent of Patagonia."

In consequence, the sole question was to know, as already stated, how far the limit along the Cordillera Nevada stretched on the south, and the Treaty of July 1881 confirmed up to parallel 52° S. the traditional boundary, which the Crown, the Conquerors, Statesmen, Historians, Geographers, and inhabitants of two sides of the Andes had always recognised.

By this Treaty, Chile acknowledged that the Cordillera separates the two countries as far as the parallel of 52° S. lat., and the Argentine Republic, in return, acknowledged on her part, as belonging to Chile, the territory adjoining the Straits of Magellan, and the greater part of Tierra del Fuego and the southern islands, while the Straits were to remain neutral. *The acknowledgement by Chile of the Cordillera as the boundary between the two countries was, therefore, the basis of the compromise, and, in order to affirm that principle, it was so declared in the first lines of Article I. of the Treaty.* To depart from that majestic wall, for any purpose or



any object, is to disregard the clearest and most precise antecedents of the negotiation which was arrived at after overcoming so many obstacles.

The principle laid down in that Treaty was so evident that it became diffused in the schools under the prestige of the Santiago University. Señor Enrique Espinoza, in a geographical text-book—quoted by Señor Bertrand, in the article “Chile” he published in the *International Geography*, London, 1899,—speaks of the eastern boundary of Chile as being the “*anticlinal line of the Cordillera de los Andes*,” or “*the crest of the Andes*.” The Chilian laws and decrees have also declared, subsequent to the Treaty, and in consequence of its terms, that the limit is the “*Sierra Nevada of the Cordillera*,” “*the anticlinal line of the Andes*,” “*the crest of the Cordillera de los Andes*,” “*the crests of the Andes*,” “*the summit of the Cordillera*,” “*the culminating line of the Cordillera de los Andes*,” etc.

In 1888 both Governments resolved to commence the demarcation, and an agreement was signed to that effect, establishing that the Experts appointed by the Treaty of 1881 should mark out the lines indicated in Articles I., II. and III. of that Treaty. In 1889 Señor Octavio Pico was appointed Argentine Expert, and, only in 1890, Señor Barros Arana, Chilian Expert.

As soon as the tracing of those lines upon the ground itself was under consideration, fresh difficulties arose, created by Señor Barros Arana, who, as Expert, set aside his previous declarations respecting the location of the boundary, and began to elude the proper performance of the work entrusted to him, thus inaugurating a period of uncertainty between the two countries which has lasted for eight years, and which only concluded when his Government and their most eminent advisers, recognised that the frontier line was to run along the Cordillera de los Andes, and that in order to safeguard Argentine sovereignty the differences between the Experts should be confined within the same Cordillera.

When the Treaty of 1881 was signed, it was not unknown in Chile that the continental divide in the southern regions occurs outside the summit of the Cordillera, and even outside the range altogether, as has been amply proved in this Report. The gaps through the range, by which the rivers from the eastern side flow to the west, were not taken into consideration as an argument against the traditional boundary in the mountain summit, in its watershed (*divortium aquarum* of the Andes), these gaps being nothing more than those often met with in a range. In 1884 Señor Alejandro Bertrand visited the region in the neighbourhood of parallel 52° S. lat., and besides recognising the known fact

that "the valleys of the rivers Palena, Aysen, Huemules and Blanco cross the Cordillera de los Andes, from one side to the other," he stated that "the *divortia aquarum* of the waters which flow into both oceans are frequently found to separate from the Cordillera's broken ridge, and to remove further to the east, sometimes reaching even to the level region of the pampas." Other Chilian explorations confirmed what Señor Bertrand had said as to the river Palena, acknowledging that its sources were to the east of the Cordillera, and what Señores Frick and Cox affirmed as to the origin of the eastern sources of the river Valdivia, which are also situated far to the east of the same range. Based on these explorations the Government of Chile tried to extend their jurisdiction to some of the eastern valleys. This was opposed by the Argentine Government, and resulted in a reciprocal declaration that "the proceedings of one or other Government which might extend their jurisdiction over *that part of the Cordillera* of doubtful dominion, on account of the definite boundary not having been yet traced therein by the Experts, would not affect the results of the demarcation, which was about to be made in accordance with the Treaty of 1881."

On April 20, 1890, the Experts met at the City of Concepción, in Chile, to settle the starting point or points of their work. Internal political complications and civil war, in Chile, suspended the work of demarcation until January 12, 1892, when the Experts met at Santiago. Señor Pico then proposed the instructions for their assistants which are reproduced on page 247, and the fundamental basis of which was the "strict application of Article I. of the Boundary Treaty of 1881 in the part within their competency."

Señor Barros Arana, after having agreed with the Argentine Expert, stated that he wished to determine the meaning of Article I. of the Treaty, and declared "that the boundary line between the two countries should pass along the watershed, although it were necessary for same to depart from the most elevated crest of the Cordilleras." Such a grave question naturally caused differences of opinion, and the Argentine Government, recognising its seriousness, gave instructions to their Expert to suspend the proceedings with his colleague. The latter, having Señor Bertrand as Adviser, attempted to carry the boundary outside the Cordillera, in order to locate it in the interoceanic water-parting, contrary to the Treaties and to his Government's conception of the watershed of the Cordillera de los Andes, as coinciding with the general highest summits of the range. The Argentine Government's opinion on the boundary was well expressed :



1. By the Minister for Foreign Affairs, Señor Zeballos, who maintained that the boundary was to run "on the central massif, leaving the valleys on either side under the respective sovereignties," and that the demarcators were to follow within that massif "the division of its own waters, which it is not possible to confound with the watershed of other minor chains of mountains connected with the massif or independent of same, nor with the *divortium aquarum* of the eastern plains, although waters may flow from them into the Pacific, through purely local and accidental geographical circumstances, which do not furnish a general rule to science or to the law of nations."

2. By the President of the Republic, who corroborated the opinions of his Minister (see page 250), and stated that the line should be marked out over the most elevated crests, and between the division of their waters; and that "to look for the division of the waters over other crests and to lay down that the line may in no case intersect a current of water, is to depart from the terms of the Treaty and to establish arbitrary conditions, which may, as applied to the ground, involve forgetfulness of the fundamental basis of the Treaty, and, by passing over the whole of the Cordillera, lead us to seek for the dividing line in the Patagonian Pampas, which would evidently be contrary to the final convention which was confirmed by the Treaty."

These opinions are completely in accordance with the leading writers on international law—Bluntschli, Fiore, Hall, Calvo, Bello, Pando, Pinheiro-Ferreira, Vergé, Pradier-Fodéré, Travers Twiss, etc.—as regards the limit to be traced along a mountain chain.

The Chilean Government did not hold the way of reasoning of their Expert, and, by intervening in the discussions, caused him to desist from theoretical controversies, and to accept the project resisted by him of investigating the geographical features, by drawing up the necessary plans for that purpose. When dealing with these difficulties, the Argentine Expert had maintained the true doctrine, that of the traditional limit in the main or central chain of the Cordillera de los Andes, which contains the greater mass of lofty peaks; had maintained the boundary such as it was described by Rosales, Ovalle, Molina, Espinosa and Bauzá, Schmiedtmeyer, Miers, Gilliss, Darwin, Gay, Pissis, Domeyko, and Barros Arana himself; there, in the line of "lofty summits where the snow never melts," and where the normal watershed of the Cordillera is found—which is the one agreed upon by the negotiators of 1881—was to be sought, according to him, the orographical boundary, the true natural barrier, in the high ridge,



in the vertex of the two general slopes of the great "Sierra Nevada" of the Andes, leaving the eastern to the Argentine Republic, the western to Chile.

Señor Pico suddenly died in Santiago, at the very moment when the surveyors of the Joint Sub-Commission of the north, after a very slight examination of the ground, had placed a divisional landmark, which Señor Virasoro, who replaced Señor Pico as Argentine Expert, considered to be erroneously located. Señor Virasoro received instructions from the Argentine Government (see page 254) to proceed to the delimitation of the boundary line along the Cordillera de los Andes, without departing from the high crests, "for the division of the waters spoken of in Article I. (those instructions say) is that of the slopes which on those heights separate on either side, and not that of the rivers and streams which flow immediately from these."

Thus the Argentine Government did not depart from their rights. As the Argentine sovereignty extends over all the territory to the east of the summit of the Cordillera, the question of sovereignty could not be discussed, the work of the Experts being merely the survey of the Cordillera, the determination of its summits, and the demarcation of the boundary line therein.

It was in view of such concrete Instructions that the Argentine Expert rejected the proposals of the Chilian Expert considered in pages 255-8. The Chilian Expert, as he did with Señor Pico, again pressed his ideas when negotiating with Señor Virasoro, and thus caused the relations between them to become strained. He attempted to interpret Article I. of the Treaty of 1881 in the sense that the rule of demarcation might be the watershed, considering as such not the watershed of the central chain of the Andes, as he did before his appointment as Expert, but the separation of the Atlantic and the Pacific hydrographical basins; therefore, in his view, the rivers flowing into the Pacific must be considered as Chilian from their sources, and those flowing into the Atlantic as Argentine, likewise from their sources, thus changing the nationality of Argentine settlements situated to the east of the Andean summit but to the west of the continental divide.

The Chilian Government had not openly embraced the theory of the continental divide expounded by Señor Barros Arana, but the Argentine Government desired, once for all, to avoid ambiguous interpretations, and to determine the true and only meaning of the Covenant. This was the origin of the Protocol of 1893, which also dealt with some other points of the demarcation.

There were at that epoch five points upon which the opinions of the Experts

differed, viz.: (1) the starting point of the boundary in Tierra del Fuego ; (2) the faculties of the Sub-Commissions ; (3) the San Francisco landmark ; (4) the possibility for the Argentine Republic of having ports on the Pacific ; and (5) whether Article I. of the Treaty of 1881 provided that the boundary line was to follow the continental divide, or whether it established that it should run along the most elevated crests of the main range of the Cordillera that may divide the waters.

The first and second points are outside the Arbitration. The third was settled by ordering an accurate survey of the ground where the landmark was erroneously located, and by directing that, in the event of errors being found in that location, the landmark should be transferred to an appropriate position according to the Boundary Treaty. The fourth was settled by means of a compromise, according to which the Argentine Republic waived her eventual rights of access to the Pacific, and Chile, on her part, rejected the attempts of her Expert to alter the boundary agreed upon along the high summits of the Cordillera. The fifth point was the one which had created the greatest difficulties, and it was resolved, in accordance with Nature, Tradition, the Constitutions of Chile, the Treaties of 1826, 1856 and 1881 between Argentina and Chile, and also in accordance with the Treaty between Chile and Spain of 1846, wherein the Chilean inheritance from the mother country was clearly defined.

Article I. of the Protocol, confirming and reproducing Article I. of the Treaty of 1881, ordered that the Experts and the Sub-Commissions shall observe, as an invariable rule of their proceedings, the principle according to which the boundary is the Cordillera de los Andes, the line running along its most elevated crests that may divide the waters and passing between the slopes which descend one side and the other ; and Article II. solved any doubts regarding the geographical situation of the dividing line, when establishing : "The undersigned declare that, in the opinion of their respective Governments, and according to the spirit of the Boundary Treaty, the Argentine Republic retains her dominion and sovereignty over all the territory that extends from the east of the principal chain of the Andes to the coast of the Atlantic, just as the Republic of Chile over the western territory to the coasts of the Pacific; it being understood that by the provisions of said Treaty, the sovereignty of each State over the respective coast line is absolute, in such a manner that Chile cannot lay claim to any point toward the Atlantic, just as the Argentine Republic can lay no claim to any toward the Pacific."

The Protocol, in consequence, reaffirmed the traditional eastern boundary



of Chile, *the summit of the Andes*, as stated by Diego de Almagro in 1535, and established that each of the nations retains, or continues to possess, the territories on the east or west of the Andes, divided by its main chain, the central chain, the snowy ridge, the barrier, the wall, always visible and practically impassable over its great extent. The Protocol, besides, clearly enacted, in unmistakable terms, that each country is entitled to all lands and waters, to wit, lakes, lagoons, rivers and *parts of rivers*, streams, slopes, etc., situated on the respective side of the main chain of the Andes, the line along its summit thus crossing over the *water-gaps* as it crosses over the *wind-gaps*, these being the two descriptions of mountain gaps or passes according to the true geographical meaning. The Chilean Government understood the Protocol in this sense when negotiating it (see pages 294 and following), and when approving the proceedings of the Delegates to the Conference at Buenos Aires in 1899 (see page 421).

In Article VI. the demarcation is ordered to be made in the mountains, and the location of the landmarks giving visible existence to the boundary line is to be effected in each pass or accessible point of such mountains, so that no confusion can arise as to the letter and spirit of that Article ; moreover, at that moment it was perfectly well known to both parties that where the Chilean Expert tried to trace the boundary, in order to carry out his theories, there were neither passes nor accessible mountainous points at all, inasmuch as the mountains, without which passes and accessible points can have no existence, were wanting, extensive plains taking their place.

In short, the Protocol rejected once more the Chilean Expert's theories on the interoceanic divide by declaring that the frontier line might cut water-courses and leave "*parts of rivers*" in either country ; by interpreting the first clause of the Treaty of 1881, and providing that Argentine sovereignty on one side and Chilean on the other extended up to the summit of the main chain of the Andes ; by admitting the possibility of the frontier to be found penetrating into the channels of only one of the oceans ; by ordering boundary marks to be planted one on each pass or accessible point of the mountains ; and, finally, by deciding that the visible course of the rivers, when descending into the neighbouring plains, is not "*actually necessary*" in the demarcation of the frontier.

The difficulties between the Experts were thus settled by the explanations in the Protocol, the clear object of which was definitely to confirm that the boundary line must run along the crest of the main or central chain of the



Cordillera de los Andes, and that this line should cross not only the wind-gaps but also the water-gaps which exist in that chain, both Governments considering that the principle adopted by other nations in similar cases should be followed in this. It seemed as if no more difficulties could arise after these definitions of the boundary, to be marked out by the Experts.

In order to commence the actual demarcation, the Experts again met to give joint instructions to their assistants. Though the Chilian Expert once more made an attempt to propose the water-divide line (see page 306), putting aside the summits of the Cordillera de los Andes, the "Instructions for the assistants who are to mark out the boundary line between the Argentine Republic and the Republic of Chile in the Cordillera de los Andes," were signed in January 1, 1894. Article V. of these Instructions, referring to the operations on the ground, reasserted the traditional boundary by ordering that the Sub-Commissions "shall investigate the situation in said Cordillera of the main chain of the Andes, in order to seek in same the most elevated crests that may divide the waters, and shall mark the frontier line on their accessible parts, making it pass between the slopes which descend one side and the other." Article III., dealing with the location of landmarks, repeated that they shall be planted "one in each pass or accessible point of the mountain which may be situated on the boundary line."

Notwithstanding these clear instructions, that ordered the tracing of such an orographical boundary as the crest line of the main chain of the Andes, the Chilian Expert added in the Record which contains these instructions a definition of his own of the words "main chain of the Andes" (*encadenamiento principal de los Andes*), declaring that by these words he "understands the uninterrupted line of crests which divide the waters and which form the separation of the basins or hydrographic regions which are tributaries to the Atlantic on the east and to the Pacific on the west, thus determining the limit between the two countries according to the principles of geography, the Boundary Treaty (the Expert thus set at nought the Protocol of 1893), and the opinion of the most distinguished geographers of both countries."

The Argentine Expert, who could not recognise in the Chilian Expert the right of overruling the authority of the Governments and Congresses of the two countries to the extent of altering the meaning of the words, replied, "that he regretted the insistence of his colleague in wishing to establish the definition of what he understood by main chain of the Andes (*encademnaiento principal de*

los Andes), because that did not come within the powers of the Experts," and immediately afterwards, going fully into other considerations, he quoted the Protocol of 1893—omitted by the Chilian Expert—which mentions the territorial sovereignty of each country. He also said that it was by virtue of the considerations he had expressed, "that he ought not to deal with the words employed by the Chilian Expert to define the principal chain of the Andes, being unable for this reason to take into consideration any excess or deficiency in the definition, and specially when no difficulty had arisen on facts which should cause him to consult his Government, nor was it likely that it would arise, with regard to what his colleague also agreed."

The two Agreements of 1881 and 1893 ordered that the boundary line should run along the highest summits of the Cordillera, i.e. the summit of its main or central chain, along its watershed, and the Chilian Expert's personal definition could not invalidate the tradition nor the opinions of the statesmen of both countries. If the continental water-parting coincided with the summit of the Andes his interpretation of the main chain would be practically harmless, though continuity in a mountain chain does not necessarily mean that there are no gaps or gorges through which rivers run, as has been recognised by the Chilian Government; if, on the contrary, the continental water-parting did not occur in the summit of the Andes, but within its main chain, the difficulties that might arise when demarcating the line on the ground were to be resolved by the conciliatory means determined in Articles I. and VI. of the Treaty of 1881, and X. of the Protocol of 1893; if, during the surveys, that continental divide were sometimes found to be produced outside the main chain of the Cordillera de los Andes, it should not be taken into account when tracing the boundary.

The Argentine Expert, Señor Quirno Costa, then ordered the surveys necessary for the demarcation, according to the Instructions of 1894; the Chilian Expert did the same, but fresh disagreements soon arose between them upon the results of the surveys. Their assistants made an examination of the region where the landmark at the gap of San Francisco was located, in order to determine if it had been correctly planted according to the Treaty of 1881, and in fulfilment of Article VIII. of the Protocol of 1893; the surveys of the two parties led them to different conclusions, and thus this difference of opinion, which could not be solved either by the Experts or the Governments, has been submitted to the decision of Her Britannic Majesty's Government. Other difficulties in reference to the tracing of the boundary line continued to crop up, and the discussion bore



upon four main points, to wit: (1) *the Puna of Atacama* ; (2) *the Arbitration* ; (3) *the channels in 52° S. lat., near the Cordillera* ; (4) *the San Francisco landmark*. These points formed the object of the Agreement of April 17, 1896.

It is only as an element of reference that the first point has to do with the Arbitration. In fact, the proceedings of the Representatives of both Governments, when dealing with the differences in the tracing of the boundary between 23° and 26° 52' 45" S. lat., are extremely valuable, inasmuch as the geographical views of the Chilian Delegates, on the boundary agreed to in the Treaties of 1881 and 1893, support the Argentine Expert's claims as regards the points submitted to Arbitration. The second, third and fourth points lead directly to the object of this Report, as it is by the resolutions agreed to in that Convention that Her Britannic Majesty's Government has been appointed Arbitrator. It was established that the differences between the Experts should be confined within the Cordillera de los Andes ; that only those geographical differences were to be submitted to Arbitration ; that they should be solved by strictly applying the Treaties, and after the ground should have been examined by a Commission appointed by the Arbitrator ; that the same Arbitrator should decide the differences that might arise between the Experts, when fixing the line which would leave to Chile the coasts of the Pacific channels, in the vicinity of 52° S. lat. ; and that the provisional location of the San Francisco landmark should not be considered as a basis, or a binding antecedent, for the delimitation of that part of the frontier.

Although in this Agreement reference is to be found to the Cordillera de los Andes, no attempt was made to include in it any clause having any connection with the continental divide. Both Governments, in observance of their Treaties, and of the basis on which they were founded, respected the boundary along the summit of the Andes. Such divergences as might arise between the Experts, as regards the location of the landmarks, should be confined within the boundary agreed upon and recognised beforehand as "immovable." The Cordillera de los Andes could not be, therefore, abandoned ; and the Arbitrator chosen was a guarantee of just decision as regards the determination of its main chain.

The Agreement of April 1896 having been sanctioned, all the difficulties which had arisen for the marking out of the boundary line having been solved, the Argentine Expert, Señor Moreno, and the Chilian Expert, Señor Barros Arana, met at Santiago in the beginning of 1897, in order to settle the general frontier line ; but, from the very first moment, the Chilian Expert raised again, in



spite of the Agreement just signed, the theory of the continental divide, when dealing with the Instructions to be given to the Assistants, who were to survey the neighbourhood of parallel 52°. Nevertheless, it must be observed that, at this very time, he was contradicting his own theory, by accepting that the line to be traced between Point Dungeness and Mount Aymond, passing by Mount Dinero, so as to leave to Chile the northern coast of the Straits of Magellan,—which line should run to the west, “following the highest elevations of the chain of hills existing there,”—was marked out in such a way as to cut some of the streams descending from the tableland and intersecting these heights. The line thus traced, in his opinion, “corresponded to the correct interpretation of the Treaty of 1881,” this opinion being based upon “the data previously existing with regard to the said zone, and corroborated by the details and explanations communicated by the Chief of the fifth Chilean Sub-commission in his Report of January 9, 1896, with which he sent the respective plans and records.”\*

“The most elevated crests of the Cordillera de los Andes that may divide the waters,” which rise gigantically along the frontier, were considered by the Chilean Expert as synonymous with the continental divide, and he moreover pretended that this divide was the principal feature to be taken into account for the purposes of tracing the boundary, thus setting aside the orographical line stipulated in the Treaties; but, when dealing with the boundary in connection with other orographical features relatively insignificant, as are the slight elevations situated along the coast of the Straits of Magellan at the foot of the tableland, he upheld that those orographical features should predominate, thus abandoning the divide theory, although there the characteristics of the orographical and hydrographical line were of nearly the same kind, i.e. they formed a natural frontier in a zone where more prominent features were not to be met with. Hence, from the very commencement of the general demarcation, the Chilean Expert was completely mistaken as regards the geographical requirements of the frontier to be traced along the Cordillera de los Andes, and this error gave rise to fresh difficulties with his colleague.

Señor Barros Arana, starting from the idea that the continental divide should separate both countries, thought that its tracing was a very easy task, since it would be sufficient to determine the sources of the rivers, thus rendering any other surveys unnecessary. Dr. Moreno thought, on the contrary, that the

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\* Record of the Experts, of April 28, 1897.

Experts must convince themselves by examining the ground that the provisions of the Treaties had been fulfilled, and that once the region along which the frontier was to run had been properly surveyed, the operations would be carried out without any difficulty whatever. In accordance with the opinion of the Argentine Expert, the Record of May 1, 1897, was signed, due to the opportune intervention of the Government of Chile. It was agreed in it that the number of assistants should be increased, so as to make possible a general survey of the whole extent of the Cordillera de los Andes between parallels  $23^{\circ}$  and  $52^{\circ}$ —a survey which should enable the Experts to decide upon the general boundary line by the end of the next season of operations. In this Record the continental divide was not mentioned; the investigations should be carried out in the Cordillera de los Andes. Nevertheless, Señor Barros Arana persisted in considering this divide as the sole boundary determined in the Treaties, and once more was this refuted by Dr. Moreno, who maintained that the frontier line was to be located within the Cordillera de los Andes; and that, according to the resolutions adopted by the Governments of both countries, the said line was only to be discussed after having a complete knowledge of the ground. He insisted in saying that neither the assistants, nor the Experts, nor the Governments, could fix the dividing line outside the immovable boundary of the Cordillera de los Andes, repeating to his colleague that his assistants could take into consideration any proposal made to them respecting places situated within the Cordillera de los Andes (which Señor Barros Arana continued to avoid mentioning in his communications), but not with regard to any point outside the Cordillera.

The Argentine Expert made the necessary survey, in order to propose his general boundary line to the Chilean Expert. The latter's assistants surveyed only a small portion of the continental divide region outside the Cordillera, ignoring the existence of the latter (see pages 352-3), and on August 29, 1898, both Experts met at Santiago in order to settle the frontier according to the Agreement of May 1, 1897.

The Chilean insufficient survey is, in fact, acknowledged by the Chilean Expert when he says: "*Between the parallels  $47^{\circ}$  and  $49\frac{1}{2}^{\circ}$  the geographical location of the boundary line in the Cordillera is completely unknown. . . . In short, the only region where it is impossible to mark a boundary line in a map, EVEN APPROXIMATELY, is that lying between  $47^{\circ}$  and  $49\frac{1}{2}^{\circ}$  S., viz. between the sources of the river Deseado as far as Lake Viedma.*" This declaration is of the highest importance, inasmuch as it shows that the Chilean Expert, when officially communicating that he was ready to



*discuss the boundary in the Cordillera, was unacquainted with its lateral extent, and could not have informed his Government, immediately after that communication, that the line which he proposed in that part rejected by his colleague, was, in spite of the Argentine Expert's affirmation, situated within the Cordillera de los Andes.* This last assertion led to the decision of submitting to Her Britannic Majesty's Government the differences between the Experts, in accordance with the Agreement of April 17, 1896. The British Surveying Commission will ascertain on the ground which of the two affirmations is the correct one, as regards the geographical points respectively maintained as forming the boundary stipulated in the Treaties.

The Experts met in Santiago on August 29, 1898, "to decide on the general boundary line." The Records of their proceedings have been carefully examined, as to their general declarations, in Chapter XIII., and as to the divergences in detail, in subsequent Chapters. The points submitted to Arbitration are determined in those Records, which therefore are of the utmost importance as bearing upon the whole matter dealt with in this Report. It would be almost impossible to make a short *résumé*, but, as the main considerations on the Records have been gathered in Chapter XIII., as already said, it is easy for the members of the Tribunal to examine them, whenever it may be deemed necessary.

The Argentine Expert strictly complied with the stipulations in the Treaties, and planned his boundary line, in accordance with the opinion of both Governments and the true principles of geography. The Chilian Expert, on his part, expressed views contrary to the rule of delimitation laid down in the Treaties, and, acknowledging his want of geographical data, again maintained the theory of the continental divide as opposed to that of the summit of the Andes.

The Argentine Expert at once perceived the gravity underlying the persistence of his colleague, which might be a hindrance for the discussion of the boundary line, and asked for explanations. The Chilian Expert replied that he had no difficulty in declaring that the tracing of the general line proposed by him was in accordance with the provisions of the Articles of the Treaties and Agreements quoted by the Argentine Expert, i.e. Treaties of 1881 and 1893, Instructions of 1894 and Agreement of 1896; and thus the Chilian Expert's declarations were reduced to a geographical interpretation of the boundary line within the Cordillera de los Andes, the continental divide being considered by him as coinciding with the summit of the range in its main chain—an assertion which might be true or not, but which being a matter for discussion and Arbitration, the Argentine Expert could not refuse to take into account.



Comparison being made of the lines of the Experts, and many points respectively indicated for the location of landmarks being found to be the same, they should be considered definitive points of the boundary ; but many others of those points proposed by the Chilian Expert were, according to the Argentine Expert, situated outside the main chain of the Cordillera. Dr. Moreno, being resolved to respect the Treaties, for the fulfilment of which he was appointed, sent to his colleague a draft of preamble to the Record which should contain the part of the frontier agreed upon, and in which it was said that "*the points and stretches in the Cordillera de los Andes,*" where the two lines were coincident, should be accepted as points of the general frontier line. The Chilian Expert then commenced a series of difficulties, with the manifest purpose of avoiding the employment of the words "Cordillera de los Andes." In this tendency to disregard the fundamental basis of the Covenants he went so far as to mutilate the international documents which he himself had signed, by proposing that "the mixed Sub-Commissions should carry out on the ground the demarcation of the frontier line in the manner stated in the final part of Article V. of the Instructions given by the Experts on January 1, 1894." By omitting the first part of this Article he suppressed, as an obstacle for the furtherance of his doctrines, the Cordillera de los Andes, its main chain and its most elevated crests.

In the view of the Chilian Expert, the Cordillera de los Andes, if it does not contain the interoceanic water-parting, is not the boundary of the Treaties, the boundary being formed, according to him, by a main chain of the Andes of his own invention, i.e. the continental divide ; and, therefore, this fantastic main chain of the Andes might be situated either within or outside the Cordillera de los Andes, but always where waters run in opposite directions. To attain that consequence, it would be necessary to reverse all the accepted ideas on topography and on geographical definitions, and to maintain that the drainage of a region is not the result of the orographical conditions of the ground, but that the orographical conditions are subordinate to the drainage ; in other words, that the effects precede the causes. In order to uphold these anomalous theories, the Chilian Expert refused to state in the Record that the boundary agreed upon was within the Cordillera de los Andes, a statement which the Argentine Expert considered indispensable in order to show that they had tried to proceed in conformity with the Treaties, Agreements and Instructions, which should guide the work of demarcation.

Owing to this refusal of Señor Barros Arana the meetings of the Experts were adjourned indefinitely, and both reported to their Governments what had taken place. Señor Barros Arana, in his Report, acknowledged his resistance to mention the words "*Cordillera de los Andes*," and stated that he had only taken into account the general divide of the *South American continent, or the continental divortia aquarum*; that said line is not a line of lofty summits, in the sense of containing the *most elevated peaks* of the Cordilleras, but solely in the sense of constituting the *culminating line of the continent*, which serves as the edge or ridge of separation between the springs, streams and declivities, which descend on one side and the other to form the *Chilian rivers on one side and the Argentine rivers on the other*; and that neither is the said line the crest of a main chain in the orographical meaning of this expression, but only in the hydrological sense of presenting a succession of crests, depressions and any kind of features of the ground, the continuity of which consists in the fact that it is not cut at any part by any watercourse, great or small.

Thus, the *Cordillera de los Andes as a boundary is substituted by the continental divide*.

The Chilian Government did not accept this view as to the omission of the orographical features, and the Chilian Minister for Foreign Affairs declared to the Minister Plenipotentiary of the Argentine Republic that the Expert, Señor Barros Arana, had informed him that the whole of his line was situated within the Cordillera de los Andes—a condition demanded by the Argentine Government previous to the consideration of the differences that had arisen between the Experts, so that they might be placed before the Arbitrator.

By this declaration of the Chilian Government, the differences submitted to Arbitration were reduced to divergences of opinion upon simple geographical points; therefore, the Chilian Expert's definition of *continental divide or main chain of the Andes*, does not constitute any question of the kind of those determined by the *Agreement of 1896*, and thus it was considered unnecessary by the Argentine Expert to discuss it with him. In this way was ended the Experts' protracted discussion of the boundary line, so easy of settlement in itself, which, owing to the Chilian Expert's erroneous conception of geographical and political interests, brought about the gravest of situations in both countries on several occasions.

*The boundary line proposed by the Argentine Expert combines, throughout its entire length, every one of the conditions agreed upon in the Treaties, and is in accordance with the correct interpretation of the letter and spirit of these Treaties, as understood by both Governments. There does not exist one single official document of Chile in which*



the snow-covered summit of the Andes is not recognised as forming the boundary, nor does there exist a single document emanating from the same Government, expressly maintaining that this boundary must run along the continental water-parting when it occurs outside the Cordillera. "The lofty ridge of the Cordillera should naturally separate us, leaving the western valleys and waters for the Chilians, and the eastern valleys and waters for the Argentines," said one of the first Chilian geographers, at the time of the greatest agitation promoted by the pretensions of the Chilian Expert ; and that opinion was the one general in both countries, since it has been agreed that the boundary runs along the heights of the lofty main ridge of the Cordillera, "where the snows never melt."

This "ridge," named "main chain of the Andes" in the Treaty, was the one which the Experts were to determine before tracing the boundary line. The Argentine Expert, who had effectually surveyed the mountain range, defined it as being the central chain of the Andes, the loftiest and most continuous chain, the direction of which was the most uniform, and the flanks of which shed the largest volume of water, forming thus the scientific watershed of the Cordillera. The Chilian Expert, previous to the very incomplete survey made by his assistants, defined it as the "uninterrupted line of crests which divide the waters, and which form the separation of the basins or hydrographic regions, which are tributaries to the Atlantic on the east and to the Pacific on the west," without taking note that, according to known data, such water-parting was produced where no summit of the Cordillera de los Andes, or of any kind, existed.

The Argentine Expert, in his interpretation of what is the main chain of the Andes, was in accord with the opinions of the greatest geographical authorities in the world ; and, in Chile, with the opinions of Señor Barros Arana, as historian, as geographer and as Expert ; of his technical adviser, Señor Bertrand ; of Señores Serrano Montaner, San Roman, Steffen, Krüger and Stange, all of whom, with the exception of the first named, had personal acquaintance with the Cordillera de los Andes. Could the Chilian Expert say the same thing regarding his "*hydrographical Cordillera*" ? The best answer is contained in the following words by his assistant, Señor Steffen : "It will certainly not be generally granted that the *main chain of the Andes* coincides with the ridge of crests dividing the waters. The decision of this matter is entirely one of individual appreciation, and no geographer of to-day will think of basing his plan of a mountain system solely upon that of a hydrographical map."

The Argentine Expert has interpreted the boundary in the same manner as



all the statesmen, historians and geographers of Colonial times and of the Republican era of Chile, a boundary supported by the Chilian Government and their advisers, at the same moment as the submission to Her Britannic Majesty's Government of the differences which had arisen between the Experts, and even after the defence made before the Tribunal by the Chilian Representative of the line proposed by Señor Barros Arana, as has been stated on pages 421 and following of this Report. The Chilian Expert has invented a boundary which has never been mentioned before on any occasion, and which he supported by means of erroneous geographical conceptions.

"Claims of territory are claims of a most sacred nature," and must always be founded upon indisputable rights; and when these rights are derived from the nature of the ground, as in this case, to disown them may involve permanent conflict between nations. It becomes, therefore, necessary not to fail in insistently urging them; and hence a rapid comparison of the geographical, political and economical conditions of the lines presented by each Expert may be useful.

The Argentine line, between  $26^{\circ} 52' 45''$  and  $40^{\circ}$  S. lat. is formed by the crest of the main chain of the Cordillera de los Andes, with the exception of a small region, where the same considerations which have influenced the general demarcation have led the Argentine Expert, in execution of the Treaties, to look for another chain. There, the Chilian agrees with the Argentine line throughout the whole length, except in a small part in the northern zone, where the former, according to the Argentine Expert, has not been traced in the Cordillera de los Andes, forming thus the first of the differences submitted to Arbitration. The line agreed upon combines natural, geographical, political and economical advantages for both countries.

The Cordillera de los Andes, according to the historians, geographers and geologists who have personally visited it, is the mountainous mass, for the most part snow-capped, bounded on the *West* by the central valley of Chile, and by the southern longitudinal channel which is the continuation of this valley, running north and south down to the end of the continent; and on the *East*, by the corresponding valley which extends, in a north-and-south direction, to the east of the mass of Tres Cruces, comprising the depression of Lagunas Verdes, the valley of river Salado and its prolongation in the valley of Calingasta, Uspallata, etc., and, more to the south, the longitudinal depression containing the valleys of Aluminé, Chimehuin, Trafal, Espejo and Correntoso, Valle Nuevo and

western part of Lake Nahuel-Huapi, 16 de Octubre, Carrenleufu, Mañihuales, river Murta, western part of Lake Buenos Aires, river Las Heras, western parts of Lakes San Martín, Viedma, Argentino, Lakes Dickson and Hauthal and river Serrano, ending at the waters of Last Hope Inlet.

The Argentine line, to the south of 40° S. lat., continues along the summit of the main chain of the Andes, while the Chilian line, changing its general direction, runs towards the regions outside the Cordillera. The traditional boundary of the summit of the range is adopted by the Argentine Expert, but abandoned by the Chilian Expert. The Argentine line, in a general north-and-south direction, runs along the summits and over the gaps of the chain, following its main watershed, and passing from the crest of the north to the crest of the south wherever a river coming from the opposite side intersects the chain. The Chilian Expert seeks the eastern springs of the rivers flowing towards the Pacific, and makes a circuit around their head sources, however far they may be to the east of the crest, or to the east of the foot of the Cordillera, or outside it. The Argentine line consults Nature, and the economic and political convenience of the two countries, runs along the top of a general barrier, and, by means of this immovable line of separation, promotes perpetual friendship between the neighbouring countries. The Chilian line curves off into Argentine territory, recognised as such both by International Treaties and by the internal laws of Chile, and attempts in this manner to change the sovereignty over a vast extent of territory subject to Argentine dominion, by giving to Chile lands where her control, if not impossible, would at all events be very difficult, and where the existence of Chilian jurisdiction would be a source of perpetual difficulties. To the whole differences may be applied, as favouring the Argentine Republic, Quintilianus' rule: "*The party who endeavours to avoid a loss has a better cause to support than he who aims at obtaining an advantage.*"

The Argentine Expert, in applying the letter and spirit of the Treaties, was confronted by the fact that the Andean Cordillera is cut right through by ridges in several places in the immediate proximity of parallel 40° S. lat., and, bearing in mind what had been done in analogous cases by other nations in delimiting frontiers, he applied the same method when planning his general line. This line, when marked out in detail, may perhaps undergo some unimportant modifications in local points, which it may be considered more expedient to select, within the main chain. In other cases he has kept before him the conditions of the ground



upon which is to be traced the frontier between Canada and the United States, in view of the great analogies which that region presents with the southern extremity of South America.

Although the Boundary Treaties to be applied in these regions are not identical, *yet it is stipulated, with regard to the Alaska boundary, that the line is to pass along the summit of the chain of mountains supposed to run parallel to the coast*, as is the case in the Andean Cordillera, with the exception, that in the former instance it has been agreed that should the first-named chain be found to be situated more than ten marine leagues from the coast, the boundary shall not be traced at a greater distance.

In the case of Alaska, the survey has revealed the fact that the above-mentioned chain of mountains is traversed not only by rivers that descend from the east, but also by inlets which extend a long way from the west; and the Argentine Expert has borne in mind not only the clear stipulations of the Treaties of 1881 and 1893, but also the interpretations of the representatives of Canada and of the United States, in so far as they relate to the frontier line in the summit of the mountains. He had considered that this summit should correspond with the *highest and most uniform general line* (summit or "crest") of the Cordillera, as the Treaties order, and he has never attempted to claim the idea attributed to him by the Chilian Representative, viz.: that of carrying the line over the absolutely highest peaks, without taking into account *the general crest or summit*. The Argentine Expert maintains that the said summit *forms the scientific watershed of the chain, a chain which is none the less continuous because it is traversed by rivers or channels, in which respect he is in full agreement with the Representatives of Canada*, as he is also with the Government and statesmen of Chile (see pages 421 and following).

The fundamental principle in both cases is *that the mountain chain and its crest shall be the real immovable boundary*. In the Alaska Treaty, when such a boundary is not met with (or when it deviates from its general direction), a zone is fixed which cannot be passed over; in the Argentine-Chilian Treaty a line, to be agreed upon, is to be traced, which shall leave to Chile all the shores of those inlets belonging to the Pacific that may penetrate, in the vicinity of parallel 52° S. lat., to the east of the chain along the crest of which the general boundary must run. The Argentine Republic has, by the Protocol of 1893, abandoned these waters to which the Treaty of 1881 had entitled her.

To mention in this comparison only the rivers—since, as regards the inlets,



the Protocol of 1893 determines that the shores of the Pacific Ocean are to belong to Chile—Fraser river in North America may be compared to river Las Heras, the Skeena with the Aisen, the Stickine with the Palena, the Taku with Fetaleufu, the Altseek with the Puelo, etc. If geographers were asked, in the case of the above-mentioned rivers of North America, which ought to be the dividing line in the Cascade Range and in its prolongation along the Saint Elias Alps, there is no doubt as to the reply they would give. All would state that it ought to pass along the summit-line of those mountains in their own normal and scientific watershed, and none of the authorities consulted would say that the chain ought to be abandoned in order to carry the frontier to the east of the western mountains, along the line of the continental waters, which at some points may be found even to the east of the crest of the Rocky Mountains.

The Hon. David Mills, the Canadian Minister of Justice, recently stated, when referring to the pending boundary question :—" It is too clear to require argument that the limitary line was to follow the coast range, and the summit of that coast range, whether high or low, was to be the boundary when it was not more than ten leagues from the coast. In many places inlets extend through canyons in the mountains, and so much of each of those inlets as would be cut off by a line drawn from the summit of the mountain upon the one side, to the summit of the mountain upon the other, is Canadian territory. The line cannot be removed further inland, because there may be a gap in the mountains into which an arm of the sea extends. The coast range approaches these inlets on each side, in most cases, near the waters of the ocean. When you pass Lynn Inlet, it will be found that the coast range embraces peaks from 10,000 to 18,000 feet high, and it does seem to me preposterous to contend that the provisions of the Treaty can be applied by drawing a line in the rear of those mountains, as would certainly be done if the boundary passed round the head of Lynn Inlet." \*

With the exceptions incident to the case, having regard to the differences noted between the Agreements of Great Britain with the United States and those of the Argentine Republic with Chile, it is evident that the opinion which has guided the Argentine Expert in tracing his line south of parallel 40° S. lat. agrees with that of the eminent authority quoted.

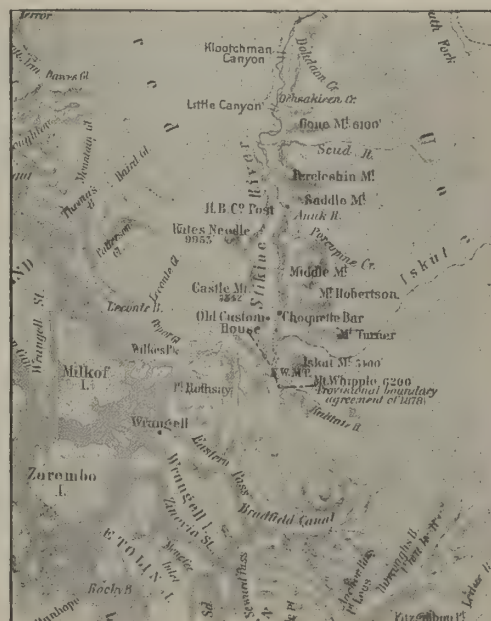
The Argentine Expert, carrying out the stipulations of the Treaty of 1893,

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\* *Globe*: Toronto, Saturday, September 2, 1899.

and applying the procedure indicated for the case provided for, contends that the boundary should run along the summit of the main chain of the Cordillera, where is "*la ligne du grand partage des eaux*"; and, when following along that chain, river gorges or valleys are met with, intervening between that chain, the line of demarcation must cut across these, since the Argentine Republic cannot hold any territory to the west of the Andean Cordillera, and still less possess ports on the western coast of Patagonia. Where the Argentine line, running along the summit of the mountains, cuts mountain passes through which rivers flow from the east, the points chosen combine all the conditions desirable for making a good frontier. These points are analogous to those looked for in the provisional boundary of the Dominion of Canada and the territory of Alaska in the region about the head of the Lynn Canal, settled in 1822, and in the conventional boundary line on the Stickine river, agreed to in 1878, where the features of the ground are the same as those at several points of the Argentine line, as shown in the map here reproduced.

This line runs, throughout its whole extent, over the crest of the mountains, in a similar manner to the line advised by Dr. Dawson, who represented Canada in the delimitation of the boundary in Alaska, and who stated that: "This part of the line which would follow on the Saint Elias Alps might well be marked, as suggested by Mr. Dale (the United States representative), by the mountain summits themselves united by a series of great triangles. This lofty chain of mountains, though everywhere visible from the coast, is practically inaccessible." Dr. Dawson says that at the point where the line, along the whole of the Alaskan boundary, crosses rivers or other avenues of communication, it would be sufficient to erect permanent landmarks at the fixed points in order to ascertain and define the places at which the line passes. The map (No. 16) accompanying the



From General Map of the North-western Part of the Dominion of Canada. (Published by authority of the Hon. Clifford Linton, Minister of the Interior, December 1898.)



official publication of the United States, whence these quotations are made,\* shows the two lines, the Canadian and that of the United States, proposed for that part of the frontier, and both coincide along the summit of the Alps of Saint Elias *cutting the river Altsek*.

Plates X. to XIV. show in a graphic manner the accuracy of the Argentine line, which combines all the requisite conditions, and they also indicate the inconsistency of the Chilian line at the points submitted to Arbitration.

The first is the line of the Treaties; it runs along "the most elevated crests of the Cordillera de los Andes" of the 1881 Treaty, along "the principal chain of the Andes" of the Protocol of 1893, intersecting the rivers where they cut across the main chain, following from north to south the "Cordillera Nevada" of the traditional boundary, and giving Argentina no access to the Pacific shores. The second line in some parts leaves in Chilian territory the whole of the Cordillera de los Andes.

The first line retains under Argentine sovereignty the whole country to the east of the main chain of the Andes. The second line gives to Chile not only the whole territory to the west of the main chain of the Andes, but, in some parts, all the Cordillera, together with a large tract of country to the east of the range which has always been under Argentine dominion.

The Argentine line keeps two important facts in view:—

1. The Cordillera de los Andes is the frontier necessary to the Argentine Republic, because, with this barrier standing between the two nations, no encroachment or friction is possible.

2. Only the full dominion and sovereignty over the whole eastern slope of the Cordillera can provide the Argentine Republic with the elements required for her development and for her national defence.

The Chilian line disregards Treaties and mutual advantages, and, were its realisation possible, it would be a dangerous boundary. The possibility of such an eventuality is what the Argentine Government has always resisted, strong in its rights.

The Argentine Experts, when discharging their duties, have never had in view any territorial expansion; they have aimed at a frontier that, ensuring peace to the vast industries which are there developing, would irrevocably define the respective spheres of activity of the two peoples.

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\* Message from the President of the United States transmitting Report on the Boundary Line between Alaska and British Columbia, March 2, 1889.



The Argentine line, where differences have arisen between the Experts, respects tradition; and recognises as Chilian that which Chile herself and foreign nations have recognised to be Chilian territory, viz.: that extending to the west of the Andes; the line runs along the summit of the Cordillera, as the members of the Chilian Boundary Commission, Señores Barros Arana, San Roman, Bertrand and Steffen have considered it. The Chilian line extends down the summit of the main chain outside the Cordillera, follows an abnormal divide inconsistent with geography and Treaties, and sets aside History and Tradition, disregarding the old proverb: NE TRANSGREDIARIS TERMINOS ANTIQUOS QUOS POSUERUNT PATRES TUI.

The Argentine Expert declared that his line is traced along the main chain of the Andes, and that the Chilian line, at the points which he rejected, is outside the Cordillera. The Chilian Expert has not controverted the Argentine line as to its location in the main chain of the Andes, but has traced his line in the continental divide, where the Cordillera does not exist.

Natural and geographical proofs of the affirmations of the Argentine Expert are to be found in this Report, as well as the true description of features, so completely distorted by the Chilian Expert—in opposition to the evidence of history, geography and law—that a national prejudice has been created in Chile against the Argentine claims. The assertions put before the Tribunal by the Chilian Representative have also been refuted.

At the opening of the boundary question, Chile recognised that the Cordillera de los Andes was the "*natural division*" between the two countries. The Treaty of 1881 and the Protocol of 1893 stipulated that any questions that might arise, either on account of the Boundary Convention, or owing to any other cause, should be submitted to Arbitration, *but in all cases the Cordillera must constitute the immovable boundary between the two nations*. Article II. of the Agreement of April 17, 1896, established that the differences between the Experts could only arise when fixing in the Cordillera de los Andes the boundary marks. The points which had not been jointly agreed upon by the Experts, were submitted to Arbitration only after the Chilian Minister for Foreign Affairs declared in the Record of September 22, 1898, that Señor Barros Arana had communicated to his Government that his line is situated in the Cordillera de los Andes. Nevertheless, the Argentine Expert affirms that a vast extent of the Chilian line is outside the Cordillera, and, this being so, it cannot be included in the questions which, according to the Treaties, form the matter for Arbitration.

The Argentine and Chilian Governments have called upon Her Britannic Majesty's Government to decide their differences in accordance with the Treaties and Conventions, and this Report shows the origin and *raison d'être* of the said differences. They have not their source in a doctrinary question, as appears to be maintained in the statement read by the Representative of Chile\* : they are, on the contrary, purely geographical. The boundary between the two countries is the Cordillera de los Andes; and, according to the statesmen of Chile, that boundary runs along the snowy crest of the range.

The Argentine Republic maintains :

1. That her Expert has traced the dividing line according to this immovable boundary.

2. That the Chilian line, as regards the points which have not been accepted by the Argentine Expert, is not situated in the main chain of the Andes, as it must be according to the Treaties, many of these points being outside the Cordillera, and hence outside the sphere of the Arbitration.

3. That the continental divide has never been agreed to as the boundary; that it is foreign to the Arbitration; that the Arbitration only refers to differences as to the geographical localisation, within the Cordillera de los Andes, of the boundary landmarks, and that these differences can only be settled after the

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\* The Chilian Minister for Foreign Affairs, in the Report presented in 1899 to the Chilian Congress, said: "In a note of November 23 of last year, our Minister in London, in concert with the Chargé d'Affaires of the Argentine Republic, addressed a note to the Foreign Office calling its attention to the above-mentioned Record of September 23, and stating that although, as a consequence of the efforts of the Governments interested, a considerable portion of the frontier line had been determined, the contemplated differences and disagreements still subsisted in respect of another important part of the same.

"In presence of this situation, it was the opinion of both Governments that now had arisen the case anticipated in the second basis of the Agreement of April 17, 1896, which provides for soliciting the action, as Arbitrator, of Her Britannic Majesty's Government, and that, in view thereof, the Government of Chile, on their part, had the honour to do so. In execution of the orders transmitted by this Ministry, the Minister for Chile, when making this request, appended copies of the Records of the Experts, and of those of the respective Governments, in which had been specified the differences that had arisen, and a plan for the purpose of facilitating the comprehension of the scope of the disagreements to which the above-mentioned Records refer. He concluded by stating that, in accordance with such rules of procedure as Her Britannic Majesty's Government might think fit to lay down for the Arbitration, there would be an opportunity of submitting further data and information which would throw light upon the question.

"At the same time the Representative of the Argentine Republic approached the Foreign Office in a similar manner. . . .

"After completing this preliminary examination, a *Commission shall be appointed, which, in conformity with Article II. of the Agreement between the Governments of Chile and Argentina, dated April 17, 1896, is to proceed to survey the ground, and prepare a Report for Her Britannic Majesty's Government.*

"The conclusions arrived at by the Commission shall be communicated to the Tribunal, which will thus be in possession of all the necessary antecedents, and in a position to pronounce definitively upon the various points in dispute submitted to its consideration and decision."



surveys of the ground determined in Article II. of the Agreement of April 17, 1896, should have shown that they turn upon points situated within the Cordillera de los Andes as far as the neighbourhood of parallel 52°, or that these points are found to be comprised in Article II. of the Protocol of 1893, and in Article III. of the Agreement of 1896.

The general boundary line of the Treaties runs along the summit of the Cordillera de los Andes (Treaty of 1881), i.e. along the main chain mentioned in the Treaty of 1893, with the exception referred to in Article II. of the latter Treaty. As the sole reason for rejecting the true line, the Chilian Expert has put forward his own interpretation of the main chain of the Andes. This interpretation has been rejected by the Chilian Government, when approving and supporting the views of the Chilian Delegates at the Conference of Buenos Aires, who declared that a chain cut by rivers and by wide openings, "*combines the conditions of height, continuity of lofty summits and division of waters contemplated in the Treaties*," thus confirming the opinions of the Chilian Minister for Foreign Affairs, during the discussion of the Protocol of 1893 (see pages 301 and following); and therefore settling, in accordance with the Argentine view, the question so erroneously discussed by the Chilian Representative before the Tribunal, as to the "parts of rivers" referred to in Article I. of the said Protocol.

The boundary along the summit of the Cordillera de los Andes, which the British Technical Commission is to seek, is "*immovable*," "*easy to distinguish*," "*difficult to cross*," and must be definitely sanctioned on the ground, as it has been sanctioned in the Treaties, throughout its whole extent as far as the vicinity of parallel 52°. Thus will receive practical application: the words of the distinguished Chilian statesman, Don Manuel Rengifo—"The territory of the Republic (Chile), being circumscribed by eternal boundaries, which separate it from the rest of the Continent, we do not run the risk of seeing ourselves engaged in boundary wars, nor in our political plans can any ambitious expectation find favour such as would alarm adjoining provinces;" the words of the Chilian Plenipotentiary, Señor Santiago Lindsay—"The Chilian Government, by word of mouth and in every manner, has declared that it does not discuss that which bears no discussion, that is, that the eastern frontier of Chile has been and always will be the highest crests of the Cordillera de los Andes;" the words of the Chilian Plenipotentiary at Buenos Aires, Señor De Putron, who speaks of "the formidable barriers which Nature has placed between the two Republics;" the words of the Chilian Delegate, at the Conference of Buenos Aires, Señor



Altamirano—The Andes, “immense mass of snow and granite,” “majestic and almost impassable barrier to the armies which, thwarting the designs of God and the manifest indications to the destiny of two peoples, might attempt to scale it with conquest and ambition in view.” . . . .

The Argentine Republic confidently hopes that, when resolving the differences submitted to the Arbitration, the landmarks proposed by her Expert, Nos. 1, 2, 267 to 274, 282 to 302, and 306 will be accepted, and that the Chilian Expert's landmarks, Nos. 1 to 9, 257 to 262, 271 to 330 and 333 to 348 will be rejected. With that solution the boundary will ultimately run along the Cordillera de los Andes, the snow-capped summits of which, towering in space, seem like gigantic landmarks purposely placed by Nature, to warn either country : THUS FAR SHALT THOU GO, AND NO FARTHER.



# APPENDIX

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TREATIES, AGREEMENTS, RECORDS, ETC.,  
ON THE BOUNDARY QUESTION BETWEEN THE  
ARGENTINE REPUBLIC AND CHILE





## SUMMARY OF APPENDIX.

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TREATY OF 1826	INSTRUCTIONS FOR THE ASSISTANTS
TREATY OF 1856	AGREEMENT OF 1895
TREATY OF 1881	AGREEMENT OF 1896
CONVENTION OF 1888	RECORD OF THE EXPERTS
TREATY OF 1893	RECORDS OF THE PROCEEDINGS, 1898-1899
RECORD OF DECEMBER 24, 1893	CONFERENCE OF BUENOS AIRES



## TREATY OF 1826.\*

It being conducive to the interests of the Republics of the United Provinces of the Río de la Plata and Chile, to solemnise and regulate, by means of a Treaty, the relations of Friendship, Alliance, Commerce and Navigation, which have naturally subsisted between the two Republics since their glorious Emancipation; they have for this purpose named their respective Plenipotentiaries, viz.:

His Excellency the President of the United Provinces of the Río de la Plata, General Don Ignacio Alvarez y Tomas, his present Minister Plenipotentiary to the Government of Chile; and His Excellency the Vice-President of that Republic, Don Manuel José Gandarillas, Minister of State of the Departments for Interior and Foreign Affairs;

Who, having exchanged their respective full powers, found to be in due form, have concluded and agreed upon the following Articles:—

ART. I. The Republics of the United Provinces of the Río de la Plata and Chile ratify solemnly and for ever the friendship and good understanding which have naturally subsisted between the two Republics, from the identity of their principles and their common interests.

II. The Republics of the United Provinces of the Río de la Plata and Chile contract a perpetual Alliance, for the maintenance of their Independence, against all foreign dominion whatever.

III. The contracting Republics engage themselves to guarantee the integrity of their territories, and to take action against every foreign Power which shall attempt to change by force the boundaries of the said Republics, as recognised before their Emancipation, or, subsequently, in virtue of special Treaties.

IV. The contracting Republics engage not to conclude Treaties of Peace, Neutrality, or Commerce, with the Spanish Government, unless preceded by the recognition on the part of that Government of the Independence of all the States of America formerly Spanish.

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\* See Art. III.



V. In respect of the Alliance, their co-operation shall be regulated conformably to the respective circumstances and resources of the contracting parties.

VI. The relations of Friendship, Commerce and Navigation between the two Republics shall be founded on a perfect reciprocity, and on the free concurrence of the industry of the citizens of the said Republics into each of their respective territories.

VII. Consequently, the citizens of the two contracting Republics shall enjoy, in either of the two territories, the same rights and privileges which the laws concede, or may in future concede, to the natives of the country in which they reside, and no greater contributions or duties shall be imposed upon or exacted from them, than those which are imposed upon and exacted from the said natives.

VIII. The property existing in the territory of either of the contracting Republics belonging to the citizens of the other, shall be inviolable in peace and in war, and shall enjoy the immunities and privileges which the laws concede to that of the natives of the country in which it exists.

IX. The citizens of each of the contracting Republics shall be exempt, in the territory of the other, from all forced military service in the Army or Navy, and from all forced loans or military requisitions.

X. Articles of the produce, cultivation or manufacture of either of the contracting Republics, which may be imported into or exported from the sea-ports of the other, shall not pay greater duties than those which are paid, or may hereafter be paid, on the same articles, being the produce, cultivation or manufacture of the most favoured nation.

XI. Every article of the produce, cultivation or manufacture of the contracting Republics, which may be introduced by land, from the territory of the one into the territory of the other, shall be free from all duty, and, as well in its transit as on its exportation to another country, shall be considered, in point of duties, as if it were the produce, cultivation or manufacture of the territory in which it may be.

XII. Articles which are not of the produce, cultivation or manufacture of either of the contracting Republics, and which may be introduced by land from the territory of the one into the territory of the other, shall pay ten per cent. upon the valuation of the custom house of the country into which they may be introduced.

XIII. The execution of Articles XI. and XII. shall not alter the restrictions imposed upon those effects at present monopolised in either of the two contracting Republics.

XIV. No prohibition shall be imposed on the importation or exportation of any articles, of the produce, cultivation or manufacture of, or proceeding from, either of the two contracting Republics, which shall not be equally imposed upon those of other nations.

XV. The vessels belonging to the citizens of either of the contracting Republics, shall have liberty to come securely and freely to all those places, ports, and rivers of the said territories, to which the citizens or subjects of the most favoured nation are permitted to come.

XVI. Articles of the produce, cultivation or manufacture of the contracting Republics, which may be imported into, or exported from, the ports of either of them, shall pay the same duties, and shall enjoy the same concessions and privileges, whenever they are imported or exported in the national vessels of either of the two contracting Republics.

XVII. The vessels of the two contracting Republics, and the cargoes which may be imported or exported in them, shall pay no higher duties on account of tonnage, light, harbour, pilotage, salvage in case of damage or shipwreck, or any other local duty, than those which may be paid now, or hereafter, by the vessels of the Republic, in whose territory the said importation or exportation shall take place.

XVIII. Each of the contracting parties shall be free to name Consuls for the protection of their commerce in the territory of the other; but before any Consul can exercise his functions, he must be in due form approved and admitted by the Government of the Republic to which he is sent, and each of the contracting parties may except from the residence of Consuls, such parts of its territory as it may think fit.

XIX. Whenever, in the territory of either of the contracting Republics, a citizen of the other shall die without a will, the respective Consul-General, or, in his absence, his representative, shall have the right to name guardians, for the custody of the property of the deceased, for the benefit of his legitimate heirs and creditors, giving notice thereof to the proper authorities of the respective Republics.

XX. The present Treaty shall be ratified, in the manner and form established by law, in the respective Republics, and the ratifications exchanged in this city, within four months, or sooner if possible.

In witness whereof, the respective Plenipotentiaries have signed the same, and have sealed it with their respective seals.

In Santiago de Chile, the 20th of November of the year 1826, the 17th of the liberty of both States.

(L.S.) IGNACIO ALVAREZ.

(L.S.) MANUEL J. GANDARILLAS.

## TREATY OF 1856.\*

IN the name of the most Holy Trinity. Intimate relations of friendship and commerce having existed between the Republic of Chile and the Argentine Confederation ever since they constituted themselves as independent nations, they have judged it to be very useful to promote the development and perpetuate the duration thereof by means of a Treaty of Friendship, Commerce, and Navigation, based upon the common interests of both countries, and calculated to secure to the citizens of both Republics the enjoyment of equal and reciprocal advantages. In conformity with these principles and with such praiseworthy objects, they have agreed to appoint Ministers Plenipotentiary, namely :

His Excellency the President of the Argentine Confederation, his Chargé d'Affaires, Señor Don Carlos Lamarca ; and His Excellency the President of the Republic of Chile, His Excellency the President of the Senate, Don Diego José Benavente ; who, after having communicated to each other their full powers, exchanged authentic copies of the same, and having found them in good and due form, have agreed upon the following Articles :—

ART. I. There shall be unalterable peace and perpetual friendship between the Governments of the Republic of Chile and of the Argentine Confederation, as well as between the citizens of both Republics, without exception of persons or localities, from the identity of their principles and the community of their interests.

II. The relations of friendship, commerce, and navigation between the two Republics shall be founded on a perfect reciprocity, and on the free concurrence of the industries of the citizens of the said Republics in both and in each of their territories.

III. Argentines in Chile and Chilians in the Argentine Confederation can reciprocally, and with perfect liberty, enter with their vessels and cargoes into all the places, ports, and rivers of the two States which are or may be open to foreign trade.

They can, like the natives in the respective territories, travel or reside, carry on trade, whether wholesale or retail, rent and occupy dwelling-houses, warehouses and shops, of which they may have need, carry goods and money, receive consignments, as well from the interior as from foreign countries, and in general, the merchants and traders of each nation respectively shall enjoy the same protection for their persons, commerce, and

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\* See Art. XXXIX.



industry as are dispensed to natives, subject always to the laws and regulations of the respective countries.

They shall be perfectly at liberty to manage their own business, to appear at the custom-houses, and in all the public offices, and before the tribunals and courts of law. They can also cause themselves to be represented by other persons, provided they conform to the laws which may be in force in the respective countries. They shall be equally at liberty in all their purchases, as well as sales, to fix the price of the goods, merchandise, and whatsoever any other articles are deemed of lawful traffic, as well imported as of home production, whether they be for sale in the interior or are destined for exportation, the laws and regulations of the country in which the parties reside being duly observed and fulfilled. They shall not be liable, under any circumstances, to other or higher duties, imposts and taxes, than those paid by the citizens or subjects of the most favoured foreign nation.

IV. The citizens of both Republics shall have free and easy access to the tribunals of justice for the prosecution and defence of their rights, they shall be at full liberty to employ under all circumstances, such lawyers, solicitors, or agents of every description as they may deem proper; lastly, they shall enjoy, in this respect, all the rights and privileges conceded to the natives themselves.

V. The natives of each of the contracting Republics shall, when in the territory of the other, be exempt from all personal service in the army, navy, and national guard, or militia, as also from all war contributions, forced loans, and military requisitions, for whatsoever purpose the same may be exacted.

But, on the other hand, such Chilians or Argentines as are domiciled, and have resided more than five years in any town or city of either of the two countries respectively, shall be obliged to give their services for the protection of the persons or property of the inhabitants when they are threatened with any direct or immediate danger.

VI. The property, movable or immovable, to be found in the territories of one of the two contracting Republics, and which belongs to the citizens of the other, shall be inviolable in peace and war, and cannot be occupied or taken possession of by the public authority, nor appropriated to any use whatsoever without the consent of its owner; nor shall the circumstance of its belonging to Chilians or Argentines incapacitate it from enjoying all the exemptions, protection, and security which the respective laws of each country grant to the property belonging to its native-born citizens.

The citizens of one of the Contracting Parties who reside in the territory of the other shall not be subject to domiciliary visits nor vexatious registrations, nor shall their books be liable to arbitrary examination or inspection. And in case such visit, examination or inspection should be indispensable for the detection of a crime or grave offence, it must be executed by the warrant of the competent authority, and carried out with the legal formalities of each country, nor shall these proceedings be conducted in any other

manner as regards Chilians and Argentines than is observed towards natives themselves. The Consul or Vice-Consul of the nation to whom the accused belongs may be present at the domiciliary visit, registration, or inspection, provided he comes for the purpose at the time specified by the authority decreeing it.

VII. The Argentines in Chile and the Chilians in the Argentine Confederation can acquire every kind of property by sale, exchange, donation, will, or by any other title in the same manner as the inhabitants of the country, and similarly they shall keep whatever they may have acquired up to the present time.

Heirs or legatees shall not be required to pay upon the property they may acquire by inheritance or by legacy other or higher duties than in analogous cases are paid by the natives themselves.

VIII. The citizens of both Republics shall not, respectively, be subject to any embargo, nor can they be detained with their ships, cargoes, merchandise and effects, herds of cattle, or luggage, for any military expedition whatsoever, nor for any purpose of public utility, nor even for any private object, should the latter be connected with any public or urgent one, without an indemnification previously arranged and agreed to by the parties interested, and sufficient to compensate for the use in question, as well as for indemnifying the said parties for all the losses, damages, delays, and detriment which may result from such compulsory service.

IX. The Chilean trade in the Argentine Confederation and the Argentine trade in Chile, shall be subjected to regulations of reciprocal equality. In consequence whereof, there shall not be imposed upon Chilean vessels in the ports of the Argentine Confederation, nor upon Argentine vessels in the ports of Chile, other or higher duties for tonnage, light-house, or anchorage, or any other dues affecting the hull of the vessel, than are, in the same cases, levied from national ships.

X. It has been likewise agreed that upon importing the merchandise or goods which it is or may be lawful to import into the territories or either of the contracting parties, the same duties shall be paid, whether the importation be made in Chilean or Argentine vessels, and that in exporting merchandise and goods which it is or may be lawful to export from the territories of either of the contracting parties, the same duties shall be paid, whether the exportation be effected in Chilean or Argentine vessels. In the same manner, the drawbacks or exemptions which are granted for the merchandise imported or exported in national vessels, shall be understood to be allowed to the importation or exportation of goods on board of the vessels of each one of the contracting parties respectively.

No prohibition, restriction, or tax can be imposed upon the reciprocal commerce of both countries, except by virtue of a general arrangement applicable to the commerce of all other nations, and if this prohibition, restriction, or tax should fall upon



imports or exports, the vessels of the respective countries shall not be subject thereto, unless it should apply as well to imports or exports in national vessels.

XI. The Republic of Chile engages to exempt from all duty the introduction overland into her territory of articles of production, cultivation, or manufacture of the Argentine Confederation, not to impose any duty, whether for the advantage of the State or for that of any particular locality, upon articles of Chilian production or manufacture which may be exported by land for the Argentine Confederation; and likewise to exempt from all duty the transit trade which may be carried on by land from her own territory to the Argentine Confederation of articles or goods of foreign production or manufacture. On her part the Argentine Republic engages not to burden with any duty the introduction overland from Chile into the Argentine Confederation of articles or goods of Chilian production, cultivation, or manufacture; to exempt from all impost or duty, whether paid for the benefit of the Confederation in general or for that of any province in particular, the articles of Argentine production, cultivation, or manufacture intended to be introduced into Chile; and likewise to exempt from all duty the transit trade which may be carried on overland with Chile in articles and goods of foreign production.

The exemption from duties stipulated in this Article shall not apply to the tolls which are levied in the respective countries for the preservation or improvement of the roads and bridges.

Tobacco, whether in leaf or manufactured, and playing cards, which, so long as the monopoly of them exists, cannot be sold free of duty, are excepted from what has been stipulated in this Article, but they enjoy the exemption from duties granted to the exports and imports made on the account of the Chilian Government.

XII. The transit trade in articles of foreign production which the Republic of Chile engages freely to allow through her territory, may be carried on from all the larger ports in which depôts of foreign merchandise have been formed, but their importation into the Argentine Confederation must indispensably take place at the customs station of Uspallata and the gaps of Paipote and Pulido, or others which the Government of Chile shall hereafter designate for this trade.

The importation or exportation of products or manufactures belonging to either of the contracting parties into the territories of the other, can be effected through any of the gaps or roads of the Cordillera, which are at present open; but the permit of the respective custom-house must always be produced and shown to the custom officials of the country into which the goods are imported.

XIII. With the view of preventing that the foreign goods forwarded by overland transit for the Argentine Confederation might be destined to the home consumption of Chile, thus defrauding the import dues; or the clandestine importation of such goods into the territory of the Argentine Confederation, thus defrauding the latter of the same import



dues, it is stipulated that both Governments may so arrange that the consular agents whom they have respectively in the Chilian ports whence the goods for transit are despatched, or in the Argentine ports or towns in which the said goods must be declared for importation, may, in addition to the custom-house officers of each country, superintend the despatch of the goods, and countersign the invoices or documents after the necessary inquiries have been made, in order to be assured of the exact conformity between the goods forwarded and those imported.

The said agents shall conform themselves to the instructions of the respective Governments, and shall exercise their intervention in a liberal manner, without putting impediments or delays in the way of commerce.

The intervention of the consular agents in the despatch shall be provisional, until by the consent of the two Governments, custom-houses in common for the two countries may be established in the passes of the Cordillera through which the importation into the Argentine Republic is to be effected. These custom-houses shall be composed of officials, half the number of whom are to be appointed by each Government, the expenses necessarily incurred being equally shared between them. When once established, their intervention will suffice for the transit trade.

With respect to other passes where the establishment of a common custom-house for regulating the trade is inapplicable, the intervention of the consuls or consular agents appointed by their respective Governments shall be employed.

XIV. The vessels belonging to citizens of either of the two contracting Republics shall enjoy the privilege of free and secure access to all those ports and rivers of the said territories to which the citizens or subjects of the most favoured nation are allowed access.

XV. The Argentine Confederation having, in the exercise of her sovereign rights, allowed the free navigation of the rivers Paraná and Uruguay throughout all that part of their course which belongs to her, to the merchant-vessels of all nations, the possession of the same right is acknowledged to Chile, in the extent enjoyed by the most favoured nation, but subject, nevertheless, to regulations sanctioned, or which may be hereafter sanctioned, by the national authorities of the Confederation.

XVI. Those vessels shall be considered as Argentine in Chile, and as Chilian in the Argentine Confederation, which sail under their respective flags, and which carry ship's papers and such documents as are required by the laws of each of the countries for the proof of the nationality of merchant-vessels, for which purpose the respective navigation laws shall be mutually communicated.

XVII. The vessels, merchandise, or goods belonging to the respective citizens which have been taken by pirates and brought into the ports of either country, or found there, shall be delivered up to their owners (on paying, should there have been any, the expenses of the recapture, which expenses are to be determined by the respective tribunals),

the right of ownership having been proved before the judicial courts, in consequence of a claim which must be made before the lapse of two years, by the parties interested, their attorneys, or the agents of the respective Governments.

XVIII. The ships of war and packets belonging to the State of one of the two Powers, can enter, remain, and careen in the ports of the other, the access to which is permitted to the most favoured nation. There they shall be subject to the same regulations and enjoy the same advantages.

XIX. Should it happen that one of the two contracting parties is at war with any third nation, the other party can, under no circumstances, authorise its citizens to receive or accept commissions or letters of marque for proceeding in a hostile manner against the other, or for injuring the commerce or the property of its citizens.

XX. The two contracting parties adopt in their mutual relations the principle that the flag covers the merchandise. If one of the two parties remains neutral when the other is at war with any third Power, the property covered by the neutral flag shall likewise be considered as neutral even when it belongs to the enemies of the other contracting party.

It is also equally agreed that the liberty of the flag secures also that of persons, and that the individuals belonging to a hostile Power who have been found on board of a neutral vessel cannot be made prisoners unless they be military men and actually enlisted in the enemy's service.

In consequence of the same principle of the assimilation of the flag with the merchandise, neutral property found on board an enemy's ship shall be considered as enemy's, unless it shall have been shipped aboard such vessel before the declaration of war, or before notice of such declaration shall have reached the port in which the vessel weighed anchor.

The contracting parties will not apply this principle to other nations, except to such as likewise recognise it.

XXI. In case one of the contracting Republics should be at war with another nation the citizens of the other Republic can continue their trade and naval intercourse with it, except in the towns and ports actually besieged or blockaded, it being understood that this liberty does not include the articles called contraband of war, or employed for it.

It is likewise to be understood, that a port is recognised as being blockaded only when there is in front of it a warlike force sufficient to maintain the blockade, and to notify the state of blockade to any vessel that intends entering it.

XXII. For the better security of trade between the citizens of the two contracting parties it is stipulated, that in whatsoever case any interruption should unfortunately arise in the friendly relations of commerce, or a rupture should occur between the two con-

tracting nations, the citizens of each who may be residing in the territory of the other shall have the privilege of remaining and carrying on their trade without any interruption, provided they conduct themselves peaceably, and do not in any way break the laws of the country in which they are so residing, and their property and effects, whether entrusted to individuals or to the State, shall not be subject to embargo or sequestration, nor to any other exactions than those which may be imposed upon a similar class of goods or property belonging to the natives of the State in which the said citizens are residing.

In the like case, the debts between individuals, the public funds and shares in companies, shall never be confiscated, sequestered, or detained.

Both the contracting parties, actuated by the desire of affording ample protection to commerce and guarantees for the safety of the property belonging to their respective citizens, adopt between themselves the principle of the abolition of privateering, and declare that all offenders against that principle shall be treated as pirates.

XXIII. Consular agents for each country may be established in the other for the protection of commerce. These agents, however, shall not enter upon the exercise of their functions until they have obtained the authorisation of the national Government.

XXIV. The Consuls, their secretaries and officials, shall be exempt from all public service, as well as from every kind of duties, imposts, and contributions, excepting such as they are obliged to pay on account of commerce, trade, or property, and to which the natives and foreigners of the country in which they are residing are subject, but in all other respects remaining subject to the laws of the respective States.

The Consuls, their secretaries and officials, shall enjoy the other immunities and privileges which are granted to those of the same classes of the most favoured nation in the place where they may be residing.

XXV. The archives, and, in general, all the papers of the offices of the respective Consulates, are inviolable, and under no pretext nor in any case can they be seized or examined by the local authorities.

XXVI. In the case of a citizen belonging to the nation of the Consul dying without executor or heir in the territory of the Republic, the representation of the estate shall, for the better security of the property, devolve upon the Consul, conformably to the laws of the Republic in which he resides; he can add his seals to those placed by the local authority, and when the time comes for them to be removed, he ought to be on the spot on the day and at the hour fixed by the local authority, but his absence at the time so appointed cannot suspend the legal proceedings of the local authority, after having waited for him a reasonable time.

In the case of one of his fellow-countrymen dying intestate, the Consul may take part in drawing up the inventories, making the valuations, appointing a depositary, and other similar acts having for their object the preservation, administration and liquidation of the property. The Consul shall be, of right, the representative of any one of his countrymen



who may have an interest in the succession to an estate, and who being absent from the place where it occurred, has no regularly constituted agent or attorney. As such representative he shall exercise all the rights of the heir himself, except that of receiving the money and effects of the succession, for which a special power is always necessary. The said money and effects, so long as such power has not been issued, must be deposited in a public bank or in the hands of a person approved of by the local authority and the Consul. The judge, upon the Consul's petition to that effect, can order the sale of such hereditary movable property as is liable to become deteriorated, and the deposit of the proceeds arising from such sale in a public bank; but a like disposition with respect to the other property cannot be adopted until after four years have expired since death of the former owner without any heir having come forward.

XXVII. Consular agents are empowered to claim the assistance of the local authorities for the arrest, detention and custody of deserters from their vessels, and for this purpose must address themselves to the competent authorities, and demand the said deserters in writing and with documents proving that they are deserters, and upon the production of this proof the surrender of the offenders cannot be refused. Such deserters upon being arrested shall be placed at the disposal of the said consular agents, and may be committed to the public prisons at the expense of those who claim them, in order to be sent back to the ships to which they may belong, or to others of the same nation; but in the event of their not being so sent back within the period of two months, reckoned from the day of their arrest, they shall be set at liberty, and shall not be again taken or molested for the same offence.

XXVIII. All the operations relative to the saving of shipwrecked vessels, or such as are driven ashore on the coasts of the respective countries, shall be under the direction of the Consuls. The intervention of the local authorities shall only take place, in both countries, for the purpose of maintaining order, guaranteeing the interests of the rescuers, should these not belong to the crew of the shipwrecked vessel, and securing the execution of the arrangements to be made for the entry and egress of the merchandise saved. In the absence of the consular agents, and until they arrive, the local authorities must take all the necessary means for the protection of the persons and the preservation of the goods so shipwrecked.

It is, moreover, settled that the merchandise saved shall not be subject to any custom-house duty, unless it should be intended for home consumption.

XXIX. It is agreed between the contracting parties that independently of the preceding stipulations, the diplomatic and consular agents, the citizens of all classes, the ships, cargoes, and merchandise of one of the two States shall fully enjoy in the other any immunities, exemptions and privileges which are or may be granted in favour of the most favoured nation, gratuitously, if the concession be gratuitous, and with the same compensation, should the concession be conditional.

XXX. Both contracting parties recognise the principle of the inviolability of the asylum of prosecuted or refugees for political causes or crimes ; but the said refugees shall be obliged to respect the protection of that guarantee by abstaining from any attempts against the internal tranquillity of the country which has afforded them an asylum, as well as from bearing arms against their own nation.

XXXI. It is likewise agreed that, upon requisition from each other respectively, or through their Ministers or public functionaries duly authorised to that effect, they shall deliver up to justice any persons accused of the crimes of murder, arson, the forging, uttering or passing of base coin, or of public seals, embezzlement by public officials or depositaries, or by cashiers of public establishments or of commercial houses, when the laws assign to this crime corporal or degrading punishment, and persons accused of fraudulent bankruptcy.

It is moreover expressly stipulated that the extradition shall not take place except upon the production, on the part of the Power making the requisition, of such documents as according to the laws of the nation in which the claim is made would suffice to justify the apprehension and trial of the accused, should the crime have been committed therein. Upon the receipt of these documents, the respective magistrates of the two Governments shall have power, authority and jurisdiction, by virtue of the requisition made to them to that effect, to issue a warrant for the apprehension of the person claimed, so that he may be brought before them, and hearing his defence, they may take into consideration the proofs of criminality, and if from such examination it should appear that the proofs are sufficient to sustain the accusation, it shall be the duty of the magistrate who has examined the prisoner to report to that effect to the proper executive authority, in order that the formal order for the surrender may be given. The costs of the apprehension and surrender shall be borne and paid by the party which makes the reclamation and receives the fugitive.

When the crime for which the culprit is prosecuted in Chile has a less punishment in the Argentine Confederation, and, *vice versâ*, when the crime of a culprit in the Argentine Confederation has a less punishment according to the Chilean laws, it shall be a special condition that the tribunals and courts of justice of the reclaiming nation shall assign and apply the lesser punishment.

If the accused claimed by Chile should be an Argentine, or if the accused claimed by the Argentine Confederation should be a Chilean, and if in either case he should solicit that he may not be delivered up, declaring that he will submit himself to the tribunals of his country, the Republic to which the requisition is made shall not be obliged to deliver up the said criminal, who shall be tried and sentenced by the judges and courts of justice of the said Republic, according to the evidence resulting from the trial in the country wherein the crime has been committed ; for which purpose the courts and tribunals of the respective nations shall communicate with each other, forwarding the legal documents required as the case goes on.



XXXII. Both contracting parties having on their frontiers hordes of savages who make war upon them, plunder their property, and sacrifice the lives of their citizens, have agreed that if any military expedition should be undertaken before they have decided between them upon some effective remedy for this great evil, previous notice shall be given in order that necessary precautions may be taken for their own safety.

XXXIII. In order to facilitate and promote communications between both countries by means of overland mails, it has been agreed that letters and other correspondence conveyed from any part of the territory of Chile to any part of the Argentine Confederation by the said mails, as well as letters and correspondence conveyed from any part of the territory of the Argentine Confederation to any part of the territory of Chile, and which have the franking mark put on them by the postmaster of the place whence they have been despatched, shall be conveyed free of postage by the overland mails of each country respectively.

XXXIV. If the letters or correspondence conveyed from places in one of the States by the overland mails in transit through the territory of the other, in order to be forwarded to a foreign country, should be franked in the manner expressed in the preceding Article, the postmasters of the country through which they pass in transit shall be obliged to send them by the inland mails to the post-office of their own country which may be the nearest, or which may have the greatest facilities for insuring their arrival at their destination, and this last post-office station shall be obliged to transmit them, at the first opportunity, by the mails or other means, in which the prepayment of them would not be indispensable for their conveyance.

XXXV. The letters or correspondence referred to in the preceding Article must be forwarded by the means which will enable them to reach their destination most quickly and expeditiously, even if it be necessary to prepay the postage or a part of it.

The Chilian or Argentine postmasters who in this case shall despatch the Argentine or Chilian correspondence for a foreign country, must prepay the postage of the same, debiting with the amount the Argentine or Chilian post-office from which they received them.

The respective expenses incurred by the Chilian and Argentine post-offices shall be liquidated quarterly, and that establishment which shall appear a debtor shall remit to the other, in the manner to be agreed upon by the respective Governments, the balance which is in its favour.

That which is stipulated in the present Article shall only begin to take effect from the time when the Governments of the respective countries have communicated to each other the postage tariff of the steamboats which touch at their ports and convey the correspondence for abroad, and have communicated these tariffs to the different post-office establishments which are concerned in the despatch of the Chilian or Argentine correspondence sent in transit for abroad.



XXXVI. In order that what has been agreed upon in the foregoing Article may produce the effects desired, each country engages to regulate the service of the overland mails, which will have to convey the correspondence brought by the steamboats for the other country, or that has to be transmitted in order to be conveyed by the said steamers, so that the arrival or departure of the said mails may correspond with that of the steamboats, in order that the citizens of both countries may be enabled to avail themselves of this kind of conveyance.

XXXVII. Both countries likewise undertake to pay a moiety of the expenses which will be required for the new posts which are to be established between the towns of Chile, in the immediate vicinity of the frontier, and which are in the direction towards a principal port whence the transit trade may be carried on, and the town of the Argentine Confederation appointed by the Government of that Republic, for verifying or inspecting the introduction of foreign merchandise brought in transit. The towns which, in virtue of this Article, become the centre of the respective communications of one country with the other, shall be united by the Government in whose territory they are situated, by means of regularly established posts, with the other towns to which the commercial relations of both countries are extended.

XXXVIII. The despatches or official communications of the respective Governments, and of their diplomatic agents, shall be conveyed free by the overland posts of both countries, and shall be circulated free of charge by all the overland posts of the country to which they are addressed.

Newspapers, or other periodicals, published official documents of both countries, reviews, pamphlets, and other printed papers intended for general circulation, shall likewise be conveyed free.

XXXIX. Both the contracting parties acknowledge as boundaries of their respective territories those they possessed as such at the time of separating from the Spanish dominion in the year 1810, and agree to postpone the questions which may have arisen, or may arise regarding this matter, in order to discuss them later on in a peaceful and amicable manner, without ever resorting to violent measures, and in the event of not arriving at a complete arrangement, to submit the decision to the arbitration of a friendly nation.

XL. The present Treaty shall last for twelve years, reckoned from the day upon which the ratifications are exchanged; and if, twelve months before the expiration of the above term, neither of the two contracting parties announces by an official declaration its intention of putting an end to it, the said Treaty shall still be binding for one year more, and so on successively till the expiration of the twelve months following the official declaration in question, whatever may be the time at which it is made.

It is well understood that in case this declaration should be made by either of the contracting parties, it is only the provisions of the Treaty which relate to commerce and

navigation, the effect whereof shall be considered as having ceased and expired, and that the Treaty shall not therefore be the less perpetually obligatory on the two Powers, as regards the Articles concerning the relations of peace and friendship.

XLI. The present Treaty shall be ratified, and its ratifications shall be exchanged within the term of twelve months, or sooner if possible, in this city of Santiago.

In faith whereof, we, the undersigned, Plenipotentiaries of the Argentine Confederation and of the Republic of Chile, have signed and sealed, in virtue of our full powers, the present Treaty of Peace, Friendship, Commerce and Navigation.

Done and concluded in this city of Santiago de Chile, on 30th day of August, in the year of the Lord 1855.

(L.S.) CARLOS LAMARCA.

(L.S.) D. J. BENAVENTE.

## TREATY OF 1881.

IN the name of Almighty God. The Governments of the Argentine Republic and of the Republic of Chile, animated by the purpose of resolving in a friendly and dignified manner the boundary controversy that has existed between both countries, and in fulfilment of Article XXXIX. of the Treaty of April 1856, have decided to conclude a Boundary Treaty and appointed to that effect their Plenipotentiaries, to wit :

His Excellency the President of the Argentine Republic, Doctor Bernardo de Yrigoyen, Minister and Secretary of State in the Department for Foreign Affairs ; and His Excellency the President of the Republic of Chile, Señor Francisco de B. Echeverría, Consul-General of said Republic ;

Who, after having produced their full powers and finding them sufficient for the performance of this act have agreed upon the following Articles :

ART. I. The boundary between the Argentine Republic and Chile from north to south as far as the parallel of latitude  $52^{\circ}$  S., is the Cordillera de los Andes. The frontier line shall run in that extent along the most elevated crests of said Cordilleras that may divide the waters, and shall pass between the slopes which descend one side and the other. The difficulties that might arise from the existence of certain valleys formed by the bifurcation of the Cordillera, and in which the watershed may not be apparent, shall be amicably settled by two Experts, one to be named by each party. Should they not come to an understanding, a third Expert, named by both Governments, shall be called upon to decide. A Record, in duplicate, of the operations carried out by them, embodying the points upon which they may have agreed, shall be drawn up and signed by the two Experts, and besides by the third one as regards the points decided by him. The Record, once signed by them, shall produce full effect, and shall be held firm and valid without necessity of further formalities or proceedings. A copy of the Record shall be presented to each of the two Governments.

II. In the southern part of the continent, and to the north of the Straits of Magellan, the boundary between the two countries shall be a line, which starting from point Dungeness, shall be prolonged overland as far as mount Dinero ; thence it shall continue westward, following the highest elevations of the chain of hills existing there, until it strikes the height of mount Aymond. From this point the line shall be prolonged up to the intersection of meridian  $70^{\circ}$  W. with parallel  $52^{\circ}$  S. and thence it shall continue westward



coinciding with this latter parallel as far as the *divortium aquarum* of the Andes. The territories lying to the north of said line shall belong to the Argentine Republic, and to Chile those which extend to the south, without prejudice to the provisions of Art. III. concerning Tierra del Fuego and the adjacent islands.

III. In Tierra del Fuego a line shall be traced which, starting from the point named cape Espiritu Santo in latitude  $52^{\circ} 40' S.$ , shall be prolonged southward coinciding with meridian  $68^{\circ} 34' W.$  of Greenwich, until it strikes Beagle channel.

Tierra del Fuego, divided in this manner, shall be Chilian on the western and Argentine on the eastern side. As regards the islands, Staten Island, the islets in close proximity to same, and the remaining islands lying in the Atlantic to the east of Tierra del Fuego and of the eastern coasts of Patagonia, shall belong to the Argentine Republic; and all the islands south of Beagle channel down to Cape Horn, as well as those lying to the west of Tierra del Fuego, shall belong to Chile.

IV. The same Experts referred to in Art. I. shall fix on the ground the lines indicated in the two previous Articles, and shall proceed in the same manner as therein established.

V. The Straits of Magellan is neutralised for perpetuity, and its free navigation is secured to the flags of all nations. With the view of securing said liberty and neutrality no fortifications nor military defences which may thwart that purpose shall be erected on the coasts.

VI. The Governments of the Argentine Republic and of Chile shall exercise full dominion and for perpetuity over the territories which respectively belong to them according to the present arrangement. Any question which might unfortunately arise between the two countries, whether it be on account of this transaction, or owing to any other cause, shall be submitted to the decision of a friendly Power, the boundary established in the present arrangement to remain at all events immovable between the two Republics.

VII. The ratifications of this Treaty shall be exchanged within the term of sixty days, or sooner if possible, and the exchange shall take place in the city of Buenos Aires or in that of Santiago, Chile.

In witness whereof the Plenipotentiaries of the Argentine Republic and of the Republic of Chile signed and sealed with their respective seals, in duplicate, the present Treaty in the city of Buenos Aires on the Twenty-third day of July in the year of our Lord 1881.

(L.S.) BERNARDO DE YRIGOYEN.

(L.S.) FRANCISCO DE B. ECHEVERRÍA.

In Buenos Aires, on the fifteenth day of the month of September 1881, the Minister and Secretary of State for the Department for Foreign Affairs, Dr. Bernardo de Yrigoyen, and Don Francisco de B. Echeverría, Special Plenipotentiary of the most excellent Government of Chile, having met in the Department for Foreign

Affairs of the Argentine Republic with the object of subscribing the Boundary Treaty which was signed in this city on the 23rd of last July, Señor Echeverría stated that he had received instructions from his Government to propose to the most excellent Government of the Argentine Republic, to extend the term stipulated in Art. VII. of the said Treaty for the ratification and exchange, as the time left for both Congresses to decide was not sufficient.

The Minister for Foreign Affairs replied that, in view of the consideration put forward, the Argentine Government would have no objection to stipulate the extension. In conformity with this view, Señor Echeverría exhibited the full powers which had been transmitted to him by telegraph for signing the present Protocol which read as follows :

Santiago, Chile, 13th September, 1881.—Anibal Pinto, President of the Republic of Chile, to all to whom these presents shall come, sends greeting ! Whereas I consider that the term fixed in Art. VII. of the Boundary Treaty concluded between Chile and the Argentine Republic is not sufficient for carrying out in due time the exchange of the ratifications. Therefore, having all confidence in Señor Francisco de B. Echeverría, Consul General of Chile in the Argentine Republic, I have resolved to appoint and by these presents do appoint and constitute him Plenipotentiary of Chile, in order that he may negotiate and sign with the Plenipotentiary duly authorised by the Argentine Government, a Protocol establishing the extension, which may be deemed convenient, of the term fixed for the exchange of the ratifications by the above mentioned Art. VII. of the Treaty of 23rd July of the present year. And everything that said Plenipotentiary may negotiate and sign in virtue of said full powers, I promise to fulfil in every part with the previous approval of Congress, as provided by our Constitution. In witness whereof I have granted these full powers, signed by my hand, sealed with the Great Seal of the Republic and countersigned by the Minister for Foreign Affairs, on the 13th Sept. A.D. 1881.—(Sgd) *Anibal Pinto*—(Sgd) *Melquiades Valderrama*.

Señor Echeverría, in accordance with the instructions given to him by his Government in a previous telegram, offered to present the powers in the usual form, and said promise having been accepted by the Minister for Foreign Affairs, he having on his part exhibited the full power conferred on him by H.E. the President for negotiating and signing on behalf of the Argentine Republic the present Protocol, and after discussing several indications regarding the term, both Plenipotentiaries agreed to extend for thirty days more the term stipulated for the ratification and exchange of the Treaty signed in this city on the 23rd July, the extension to be reckoned from the twenty-second of the current month.

This Protocol shall be considered an additional and integral part of the above mentioned Treaty, and shall be submitted as such to the approval of the respective Congresses.

In witness whereof they signed and sealed with their respective seals the present Protocol.—(L.S.) *Bernardo de Yrigoyen*.—(L.S.) *Francisco de B. Echeverría*.

Department for Foreign Affairs.

Buenos Aires, October 11, 1881.

Whereas :

The Senate and Chamber of Deputies of the Argentine Republic, assembled in Congress, etc.  
Enact the following

#### LAW :

ARTICLE 1.—The Boundary Treaty with the Republic of Chile concluded in this city on the twenty-third of July of the current year, and the Protocol annexed signed on the fifteenth of September of the same year are hereby sanctioned.

ART. 2.—Let it be communicated to the Executive Power.

Given in the Hall of Sessions of the Argentine Congress, in Buenos Aires, the 11th of October 1881.

FRANCISCO B. MADERO

*Carlos M. Saravia*

Sec. to the Senate.

LIDORO J. QUINTEROS

*Miguel Sorondo*

Sec. to the Chamber of Deputies.

Therefore :

Let it be complied with, communicated, published, and inserted in the National Registry.

ROCA

BERNARDO DE YRIGOYEN.

Señor Agustin Arroyo, Consul General of the Argentine Republic, and Señor José Manuel Balmaceda, Minister for Foreign Affairs of Chile, having met in the Department for Foreign Affairs with the object of exchanging the ratifications of the Boundary Treaty agreed upon between both Republics the 23rd of July of the current year, Señor Balmaceda stated that the Government of Chile was enabled to carry out the exchange of the ratifications, and to that effect he presented the authentic instrument of ratification of His Excellency the President of the Republic, and the full powers authorising him to carry out that formality. On his part, Señor Arroyo signified that he was in possession of identical documents, exhibiting in his turn the authentic instrument of ratification of His Excellency the President of the Argentine Republic, and the full powers authorising him to verify the exchange, pointing out that the instrument of ratification and the full powers of Señor Arroyo have been accredited for this act by an official telegraphic communication from the Argentine Government, which form of proceeding the Chilean Plenipotentiary accepts, the authentic instruments of ratification and full powers to be presented as soon as they arrive in this city.

The respective full powers having been examined and found to be in good form, the two ratifications were read and their contents collated, in which were found to be faithfully and exactly embodied all and every one of the articles of the Boundary Treaty of the 23rd of July of the current year.

After which the exchange of the ratifications was effected.

In witness whereof, the Plenipotentiary of the Argentine Republic and the Plenipotentiary of Chile signed and sealed the present act in duplicate, the 22nd of October of the year 1881.—(L.S.) *Agustin Arroyo*.—(L.S.) *J. M. Balmaceda*.



## CONVENTION OF 1888.

THE Governments of the Argentine Republic and of the Republic of Chile, mutually animated by the desire to execute the stipulations of the Treaty concluded by both on the twenty-third of July, 1881, concerning the demarcation of the territorial boundaries between the two countries, have appointed their respective Plenipotentiaries, to wit :

H.E. the President of the Argentine Republic, Señor José E. Uriburu, Envoy Extraordinary and Minister Plenipotentiary to Chile, and

H.E. the President of the Republic of Chile, Señor Demetrio Lastarria, Minister for Foreign Affairs.

Who, duly authorised for the purpose, have agreed upon the stipulations contained in the following clauses :

ART. I. The appointment of the two Experts referred to in Articles I. and IV. of the Boundary Treaty of one thousand eight hundred and eighty-one, shall be made by the signatory Governments within the term of two months reckoned from the exchange of the ratifications of this Agreement.

II. In order to aid the Experts in the fulfilment of their functions each Government shall likewise name within the same term five assistants.

The number of these may be increased in identical proportion by one and the other party, provided the Experts make the request by common accord.

III. The Experts shall carry out on the ground the demarcation of the lines indicated in Articles I., II. and III. of the Boundary Treaty.

IV. The Experts may however entrust the execution of the work to commissions of assistants. These assistants shall be appointed in equal number by each party. The commissioners shall adjust their proceedings to the instructions that the Experts shall by mutual accord give them in writing.

V. The Experts shall meet in the city of Concepcion, Chile, forty days after their nomination, in order to agree upon the starting point or points of their work, and upon all other necessary matters. They shall draw up in duplicate a Record of all the decisions and resolutions they may adopt in that meeting and in the course of their operations.

VI. Whenever the Experts fail to agree on any point in the fixing of boundaries or on any other question, they shall respectively communicate it to their Governments in order that the latter may proceed to designate the third Expert who is to resolve the controversy according to the Boundary Treaty of 1881.

VII. The Experts may have, at the discretion of the respective Governments, the personnel required for their private service, such as sanitary or otherwise, and whenever they may consider it requisite for their safety, they may ask for a detachment of troops from each Government, or only from that of the nation in whose territory they may be at the time. In the first case, the escort shall consist of an equal number of men from each party.

VIII. The Experts shall determine the epochs for working on the ground, and shall open their office in the city they may choose; nevertheless, they may by mutual agreement move it from one place to another whenever required by the necessities of the service.

Each Government shall furnish their own Expert and assistants with such outfit and resources as they may require for their work, and both shall pay in common the expenses of the offices and those of setting the boundary marks.

IX. In case of vacancy of any of the posts of Expert or assistant, the respective Government shall appoint a substitute within a term of two months.

X. The present Convention shall be ratified, and the exchange of ratifications made in the city of Santiago or in that of Buenos Aires, as soon as possible.

In witness whereof the Plenipotentiaries of both Governments signed the present agreement in duplicate in Santiago, Chile, on the twentieth of August, one thousand eight hundred and eighty-eight.

(L.S.) JOSÉ E. URIBURU. (L.S.) DEMETRIO LASTARRIA.

Department for Foreign Affairs.

N. 2488.  
Buenos Aires, August 17, 1889.

*Whereas:*

The Senate and Chamber of Deputies of the Argentine Nation, assembled in Congress, etc.  
Enact the following

LAW:

ARTICLE 1.—The Convention for the demarcation of boundaries in compliance with the Treaty of 1881, concluded in Santiago, Chile, on the 20th August 1888 is hereby approved.

ART. 2.—Let it be communicated to the Executive Power.

Given in the Hall of Sessions of the Argentine Congress in Buenos Aires the 9th of August 1889.

M. DERQUI  
*Adolfo J. Labougle*  
Sec. to the Senate.

B. ZORRILLA  
*Alejandro Sorondo*  
Sec. to the Chamber of Deputies.

*Therefore:*

Let it be complied with, communicated, published and inserted in the National Registry.

JUAREZ CELMAN  
N. QUIRNO COSTA.

Señor José E. Uriburu, Envoy Extraordinary and Minister Plenipotentiary of the Argentine Republic, and Señor Juan Castellon, Minister for Foreign Affairs, having met in the Department for Foreign Affairs of Chile in order to exchange the ratifications of the Boundary Treaty signed between the Argentine Republic and Chile on the 20th August 1888; after having exhibited to each other their respective full powers, and found them in good and due form, they carefully examined both the texts of the above mentioned Convention, and having found them exact and that they tallied with each other and with their originals, they verified the exchange alluded to.

In witness whereof the Envoy Extraordinary and Minister Plenipotentiary of the Argentine Republic and the Minister for Foreign Affairs of Chile signed and sealed with their respective seals the present minute of exchange, made in duplicate in Santiago on the 11th January 1890.—(L.S.) *José E. Uriburu.* —(L.S.) *Juan Castellon.*



## PROTOCOL OF 1893.

IN the city of Santiago, Chile, on the first of May 1893, Señor Norberto Quirno Costa, Envoy Extraordinary and Minister Plenipotentiary of the Argentine Republic, and the Minister of War and Marine, Señor Isidoro Errázuriz in his character of Plenipotentiary *ad hoc*, having met in the Department for Foreign Affairs, after having considered the present state of the work of the Experts entrusted with the demarcation of the delimitation between the Argentine Republic and Chile, in accordance with the Boundary Treaty of 1881, and animated by the desire of removing the difficulties which have embarrassed or might embarrass them in the fulfilment of their commission, and of establishing between both States a complete and cordial understanding in harmony with the antecedents of brotherhood and glory common to both, and with the ardent wishes of public opinion on either side of the Andes, have agreed as follows :

ART. I. Whereas Article I. of the Treaty of 23rd July 1881, provides that "the boundary between Chile and the Argentine Republic from north to south as far as parallel of latitude 52° S. is the Cordillera de los Andes," and that "the frontier line shall run along the most elevated crests of said Cordillera that may divide the waters, and shall pass between the slopes which descend one side and the other," the Experts and the Sub-Commissions shall observe this principle as an invariable rule of their proceedings. Consequently all lands and all waters, to wit : lakes, lagoons, rivers, and parts of rivers, streams, slopes situated to the east of the line of the most elevated crests of the Cordillera de los Andes that may divide the waters, shall be held in perpetuity to be the property and under the absolute dominion of the Argentine Republic; and all lands, and all waters, to wit : lakes, lagoons, rivers, and parts of rivers, streams, slopes situated to the west of the line of the most elevated crests of the Cordillera de los Andes that may divide the waters, to be the property and under the absolute dominion of Chile.

II. The undersigned declare that, in the opinion of their respective Governments, and according to the spirit of the Boundary Treaty, the Argentine Republic retains her dominion and sovereignty over all the territory that extends from the east of the principal chain of the Andes to the coast of the Atlantic, just as the Republic of Chile over the western territory to the coasts of the Pacific; it being understood that by the provisions of said Treaty, the sovereignty of each State over the respective coast line is absolute, in such a manner that Chile cannot lay claim to any point toward the Atlantic, just as the Argentine Republic can lay no claim to any toward the Pacific. If in the peninsular part

of the south, on nearing parallel 52° S., the Cordillera should be found penetrating into the channels of the Pacific there existing, the Experts shall undertake the study of the ground in order to fix a boundary line leaving to Chile the coasts of said channels; in view of which study, both Governments shall determine said line amicably.

III. In the case foreseen in the second part of the first Article of the Treaty of 1881, where difficulties might arise "from the existence of certain valleys formed by the bifurcation of the Cordillera, and in which the watershed may not be apparent" the Experts shall endeavour to settle them amicably, seeing that a search be made on the ground for this geographical condition of the demarcation. For that purpose, of joint accord, they shall draw up with the assistant engineers a map which may help them to solve the difficulty.

IV. The demarcation of Tierra del Fuego shall commence simultaneously with that of the Cordillera, and shall start from the point called Cape Espíritu Santo. At that point, visible from the sea, there are three heights or hills of medium elevation, of which the central or intermediary one, which is the highest, shall be taken as point of departure, and on its summit shall be placed the first landmark of the line of demarcation, which shall continue towards the south in the direction of the meridian.

V. The work of demarcation on the ground shall be undertaken next spring simultaneously in the Cordillera de los Andes and in Tierra del Fuego in the direction previously agreed upon by the Experts, that is to say, starting from the northern region of the former, and from the point denominated Cape Espíritu Santo of the latter. To that effect the commissions of assistant engineers shall be ready to commence the work on the fifteenth of next October. On that date the Experts shall also have prepared and signed the instructions to be given to the aforesaid commissions, according to Article IV. of the Convention of the twentieth August one thousand eight hundred and eighty-eight. These instructions shall be framed in accordance with the agreements set forth in the present Protocol.

VI. For the purpose of demarcation, the Experts, or in their stead the commissions of assistant engineers who act under the instructions given them by the former, shall seek on the ground the boundary line, and fix the demarcation by means of iron landmarks of the kind previously agreed upon, placing one in each pass or accessible point of the mountain which may be situated on the boundary line, and shall draw up a record of the operation, specifying the fundamental reasons of same, and the topographic indications for recognising at all times the point fixed, although the landmark might have disappeared by the wear of time or atmospheric action.

VII. The Experts shall direct the commissions of assistant engineers to collect all the necessary data to design on paper, of joint accord, and with all possible accuracy, the boundary line as they may demark it on the ground. To that effect, they shall indicate the



changes of altitude and azimuth which the boundary line may suffer in its course, the beginning of the streams or quebradas that descend one side and the other, writing down the names of same whenever it is possible to know them, and shall distinctly fix the points on which the boundary landmarks are to be placed. These maps may contain other geographical accidents, which without being actually necessary in the demarcation of boundaries, such as the visible course of rivers when descending into the neighbouring valleys, and the high peaks that rise on one side and the other of the boundary line, are easily indicated in the places as signs of location. The Experts in the instructions given to their assistant engineers shall point out such facts of a geographical character as it may be useful to collect, provided that this does not interrupt nor delay the demarcation of boundaries, which is the main object of the Commission of Experts, and upon which speedy and amicable operation both Governments are intent.

VIII. The Argentine Expert having manifested that, in order to sign with full knowledge of the matter the Record of 15th April 1892, by which a mixed Chilean-Argentine Commission fixed on the ground the point of departure of the demarcation of boundaries in the Cordillera de los Andes, he considered it indispensable to make a fresh reconnaissance of the locality in order to verify or rectify said operation, adding that this reconnaissance would not delay the progress of the work, which could be simultaneously continued by another Sub-Commission; and the Chilean Expert having on his part manifested that, although he believed that the operation had been carried out in strict conformity with the Treaty, he had no objection to acquiesce in the wishes of his colleague as a proof of the cordiality with which this work was being performed—the undersigned have agreed that a revision be made of what had been done, and that in the event of errors being found, the landmark shall be transferred to the point in which it should have been fixed according to the terms of the Boundary Treaty.

IX. With the desire of expediting the work of demarcation, and believing that this can be attained through the employment of three Sub-Commissions instead of the two which up to the present have been working, without the need of increasing the number of assistant engineers, the undersigned agree that henceforward, as long as the creation of others should not be decided on, there shall be three Sub-Commissions, each one composed of four persons, two on the part of the Argentine Republic and two on the part of Chile, and of the auxiliaries which by mutual agreement might be considered necessary.

X. The tenor of the preceding stipulations does not in the least impair the spirit of the Boundary Treaty of 1881, and consequently it is hereby declared that the conciliatory means provided by Arts. I. and VI. of same for obviating any difficulty subsist in full force.

XI. The undersigned Ministers understand and declare that, given the nature of some of the foregoing stipulations, and in order to invest with a permanent character the solutions arrived at, the present Protocol shall be previously submitted to the consideration



of the Congresses of both countries, which shall be done in the next ordinary Sessions, keeping it reserved in the meanwhile.

The undersigned Ministers, in the name of their respective Governments, and duly authorised, sign the present Protocol in duplicate, one for each party and affix their Seals to same.

(L.S.) N. QUIRNO COSTA.

(L.S.) ISIDORO ERRÁZURIZ.

Department for Foreign Affairs.

N. 3042.

Buenos Aires, 11th December, 1893.

Whereas :

The Senate and Chamber of Deputies of the Argentine Nation, assembled in Congress, etc.  
Enact the following

#### LAW :

ARTICLE 1.—The Protocol of the 1st May 1893 signed in the City of Santiago by the Plenipotentiaries of the Argentine Republic and of Chile, additional to and explanatory of the Boundary Treaty of 23rd July 1881, is hereby approved.

ART. 2.—Let it be communicated to the Executive Power.

Given in the Hall of Sessions of the Argentine Congress on the 2nd of December 1893.

JOSÉ E. URIBURU  
*Adolfo J. Labougle*  
Sec. to the Senate.

FRANCISCO ALCOBENDAS  
*Alejandro Sorondo*  
Sec. to the Chamber of Deputies.

Therefore

Let it be held as law of the Nation, communicated, published and inserted in the National Registry.

SAENZ PEÑA  
VALENTÍN VIRASORO.

Señor Norberto Quirno Costa, Envoy Extraordinary and Minister Plenipotentiary of the Argentine Republic, and Señor Ventura Blanco, Minister for Foreign Affairs, having met in the Department for Foreign Affairs of Chile with the object of exchanging the ratifications of the Protocol concluded in Santiago on the 1st of May of the present year between His Excellency the President of the Argentine Republic and His Excellency the President of the Republic of Chile, they carefully compared the text of the above mentioned ratifications, and finding that they tallied with each other, after producing their respective full powers, they effected the exchange referred to, on this date and in the usual form. In witness whereof they signed the present minute of exchange in duplicate, and sealed it with their respective seals.—Given in Santiago on the 21st of December 1893.—(L.S.) *N. Quirno Costa*.—(L.S.) *V. Blanco*.

RECORD OF DECEMBER 21,  
1893.

DOCTOR Norberto Quirno Costa, Envoy Extraordinary and Minister Plenipotentiary of the Argentine Republic, and Señor Ventura Blanco, Minister for Foreign Affairs, having met in the Department for Foreign Affairs, they agreed that the Experts should issue the necessary instructions to the commissions of assistants which were to leave for their respective destinations from Santiago and Buenos Aires on the 10th of next January.

Given in Santiago, in duplicate, on the 21st of December 1893.

(L.S.) N. QUIRNO COSTA.

(L.S.) V. BLANCO.

## INSTRUCTIONS

FOR THE ASSISTANTS WHO ARE TO MARK OUT THE BOUNDARY LINE BETWEEN THE ARGENTINE REPUBLIC AND THE REPUBLIC OF CHILE IN THE CORDILLERA DE LOS ANDES.

### PRELIMINARY OPERATIONS.

ART. I. The chief of each Sub-Commission shall be provided with a copy of the Boundary Treaty of the 23rd of July 1881 and of the Protocol of the 1st of May 1893, which form the paramount rule of the demarcation; and likewise a copy of the Convention of the 20th of August 1888. He shall likewise provide himself with all the plans and descriptions existing relative to the region in which he has to operate, as well as with all the instruments which he may consider necessary, and a spare supply of such as are suitable for measuring heights.

II. He shall prepare beforehand an estimate of the expenses of his expedition, which he shall present to the respective Expert in order to receive the funds for same.

III. The chiefs of each Sub-Commission shall jointly draw up a map of the work for the season, and shall form an approximate list of the points where it may be proposed to place landmarks. They shall seek the boundary line on the ground and fix the demarcation by means of iron landmarks of the kind previously agreed upon, placing one in each pass or accessible point of the mountain which may be situated on the boundary line, and shall draw up a record of the operation, specifying the fundamental reasons of same, and the topographic indications for recognising at all times the point fixed, although the landmark might have disappeared by the wear of time or atmospheric action.

IV. In accordance with said lists, approved by both Experts, each mixed Sub-Commission shall be furnished with the necessary number of iron pyramids which are to serve as landmarks.

These pyramids shall be taken to a spot whence they can be distributed among the different points marked out during a season of work.

The chiefs of each mixed Sub-Commission shall decide in each case, with the approval of the Experts, on the expediency of placing provisional landmarks, or the pyramids, according to the facilities for transportation offered by the roads, and the knowledge they may have of the localities.



## OPERATIONS ON THE GROUND.

V. It having been provided in Article I. of the Protocol of the 1st of last May, that the Experts and the Sub-Commissions who are to operate in the Cordillera de los Andes, shall have as an invariable rule of their proceedings the principle established in the first part of Article I. of the Treaty of 1881, said Sub-Commissions shall investigate the situation, in said Cordillera, of the main chain of the Andes, in order to seek, in same, the most elevated crests that may divide the waters, and shall mark the frontier line on their accessible parts, making it pass between the slopes which descend one side and the other.

VI. In the regions where, according to what is foreseen in the second part of Article I. of the Treaty of 1881 and Article III. of the Protocol of 1893, the watershed might not be apparent, through the existence of certain valleys formed by the bifurcation of the Cordillera, the Commissions shall carry out the necessary topographical operations for obtaining the data determining the geographical condition of the demarcation mentioned in the aforesaid Article III. of the Protocol, and shall mark said data on a map which they shall present to the Experts in accordance with the same Article.

VII. At every point where a landmark has to be fixed, whether a provisional one is to be placed or the iron pyramid be at once planted, bearings shall be taken to the most notable points of the horizon, and photographic views in order to locate the spot.

A Minute shall therefore be drawn up, recording between which of the opposite valleys the point chosen serves as a separation, as well as all further data and circumstances. This Minute shall be signed by the whole of the assistants of the joint Commission.

## GEOGRAPHICAL AND METEOROLOGICAL WORK.

VIII. Each Sub-Commission shall keep a register for noting down :—

- (a) The maximum and minimum temperature of each encampment.
- (b) The atmospheric pressure registered by mercurial and aneroid barometers, in each culminating point, pass, etc.
- (c) The temperature at which water boils, in same points.
- (d) The geological and botanical indications or other observations which it may be possible to obtain without prejudice to the work of demarcation.

IX. The latitude of each landmark and encampment shall be observed by the meridional altitudes.

X. The longitudes shall be determined by the occultation of the stars or other methods, where it is possible.

XI. By means of the foregoing elements, and of the azimuth of the principal and snow-capped summits of the Cordillera, they shall form, as far as possible, a chain of triangles connecting the various points of the frontier line, in accordance with the provisions of Article VII. of the Protocol of 1893.

Santiago, January the 1st, 1894.

N. QUIRNO COSTA.

*Juan J. Ochagavía,*  
Secretary.

DIEGO BARROS ARANA.

*Lindoro Perez G.,*  
Secretary.

## AGREEMENT OF 1895.

IN Santiago, Chile, on the 6th of September, 1895, Señor Norberto Quirno Costa, Envoy Extraordinary and Minister Plenipotentiary of the Argentine Republic, and Señor Claudio Matte, Minister for Foreign Affairs, duly authorised, having met in the Department for Foreign Affairs, manifested that : their respective Governments being animated by the purpose that the demarcation of boundaries between both countries should continue without interruption, in compliance with the International Conventions of 1881, 1888 and 1893, agreed as follows :

ART. I. The Experts shall direct the mixed Sub-Commissions of demarcating assistants to continue their work of delimitation, starting for their respective destinations from Buenos Aires and from Santiago between the 15th of October and the 1st of November next.

II. Said Sub-Commissions shall resume their work from the points where they suspended it last season.

III. If, during the work, the mixed Sub-Commissions should fail to agree upon the location of one or more of the boundary marks, they shall in each case draw up the respective map, and together with the survey of the ground, they shall forward it to the Experts, so that the latter, exercising their faculties, may endeavour to resolve the difference; even in the case of disagreement, the Sub-Commissions shall proceed with the demarcation from the point nearest to that in which the difficulty has arisen, and in the same direction of their work, as it is the purpose of both Governments that same be not suspended till its completion on the whole boundary line.

IV. Should the Experts fail to settle the differences that might arise in the course of the demarcation, they shall present all the antecedents to their respective Governments in order that the latter may solve them in conformity with the Treaties in force between both countries.

The present Agreement, drawn up in two copies of the same tenor, was signed by the Ministers, who affixed their seals thereunto.

(L.S.) N. QUIRNO COSTA.

(L.S.) CLAUDIO MATTE.

Department for Foreign Affairs.

Buenos Aires, 21st of October, 1895.

Let it be approved, communicated, published in the Official Gazette and inserted in the National Register.

URIBURU.  
A. ALCORTA.



## AGREEMENT OF 1896.

IN the city of Santiago, Chile, on the 17th of April, 1896, Señor Norberto Quirno Costa, Envoy Extraordinary and Minister Plenipotentiary of the Argentine Republic in Chile, and Señor Adolfo Guerrero, Minister for Foreign Affairs, having met in the Office of Foreign Affairs, manifested that the Governments of the Argentine Republic and the Republic of Chile, being desirous of facilitating the loyal execution of the Treaties in force which fix an immovable boundary between both countries, of re-establishing confidence in peace and of avoiding all cause of conflict, pursuing as always the purpose of arriving at solutions by direct understanding, without prejudice of appealing to the other conciliatory recourses provided for by said Covenants, have come to an agreement which contains the following bases :

ART. I. The operations of the demarcation of the boundary between the Argentine Republic and the Republic of Chile which are being carried out conformably with the Treaty of 1881 and Protocol of 1893, shall extend in the Cordillera de los Andes as far as parallel 23° S., the boundary line between this parallel and that of 26° 52' 45" S. to be traced with the concurrence of both Governments in the operation, and of the Government of Bolivia which shall be invited to that effect.

II. Should differences arise between the Experts when fixing in the Cordillera de los Andes the boundary marks south of parallel 26° 52' 45" S., and in case they could not be amicably settled by joint accord of both Governments, they shall be submitted to the decision of the Government of Her Britannic Majesty which the contracting parties from this moment appoint in the character of Arbitrator entrusted with the strict application in such cases of the provisions of the aforesaid Treaty and Protocol, after the ground has been examined by a Commission appointed by the Arbitrator.

III. The Experts shall proceed to effect the examination of the ground in the region near parallel 52° S. dealt with in the latter part of Article II. of the Protocol of 1893, and shall propose the boundary line which is to be adopted there, should the case arise which is foreseen in said stipulation. In the event of any difference as to the fixing of this line, it shall also be decided by the Arbitrator appointed in this Agreement.

IV. Sixty days after the difference has arisen in the cases referred to in the preceding bases, the intervention of the Arbitrator may be solicited of common accord by both Governments or by either of them separately.

V. Both Governments agree that the present location of the San Francisco boundary mark between parallels 26° and 27° S. shall not be considered as a basis or a binding antecedent for determining the delimitation of that region, the operations and the work therein effected at different times to be regarded as examinations for the definite fixing of the line, without debarring the Experts from realising others that they may think fit to direct.

VI. The Experts on resuming their work next season shall dispose the operations and surveys referred to in bases first and third of this Agreement.

VII. Both Governments likewise agree to ratify the third resolution of the Agreement of 6th September, 1895, relating to the prosecution of the work of demarcation in the event that any disagreement should arise, so that said work, as intended by the contracting parties, may suffer no interruption.

VIII. Within the term of sixty days after signing the present Agreement, the Diplomatic Representatives of the Argentine Republic and of the Republic of Chile accredited to the Government of Her Britannic Majesty, shall jointly solicit same to accept the office of Arbitrator conferred on them, to which effect the respective Governments shall impart the necessary instructions.

IX. The Governments of the Argentine Republic and of the Republic of Chile shall each pay one-half of the expenses entailed by the fulfilment of this Agreement.

The undersigned Ministers in the name of their respective Governments, and duly authorised, sign the present Agreement in two copies, one for each party, and affix their seals thereunto.

(L.S.) N. QUIRNO COSTA.

(L.S.) ADOLFO GUERRERO.

Department for Foreign Affairs.

Buenos Aires, 27th April, 1896.

Approved. Let it be published as soon as it has been laid before the Hon. Congress.

URIBURU.

AMANCIO ALCORTA.

## RECORD OF THE EXPERTS.

1ST MAY, 1897.

In the city of Santiago, Chile, on the 1st May, 1897, the undersigned Experts, Señor Francisco P. Moreno on behalf of the Argentine Republic, and Señor Diego Barros Arana on that of the Republic of Chile, having met in the International Bureau of Boundaries, after exchanging views regarding the means of hastening and giving impulse to the work of demarcation, with the view of being enabled to decide on the general frontier line at the end of the next season of operations, thus satisfying the desires of the Governments they represent, they agreed, exercising the faculty conferred on them by Clause 2nd of the Convention between the Argentine Republic and Chile dated 20th of August, 1888 :

1. To solicit from their respective Governments the appointment of three first and three second class assistants, who shall form three new Sub-Commissions to work in the Cordillera de los Andes. Said Sub-Commissions shall realise their operations : the first from latitude  $41^{\circ}$  to  $44^{\circ}$  S. ; the second from latitude  $44^{\circ}$  to  $47^{\circ}$  S., and the third from latitude  $47^{\circ}$  to  $49^{\circ} 30'$  S. approximately.

2. To solicit likewise from their respective Governments the appointment of the number of auxiliaries required for carrying on with all activity the work of the new Sub-Commissions, as well as that of those at present existing.

3. If, during the operations, differences should arise between the respective assistants as to the location of the boundary line, the work of reconnaissance and survey of the ground shall be continued without interruption to the end of the season.

The Experts drew up and signed two copies of the present record.

F. P. MORENO.

DIEGO GONZALEZ VICTORICA.

DIEGO BARROS ARANA.

ALEJANDRO BERTRAND.



## RECORD OF THE PROCEEDINGS

OF THE MEETING OF  
THE ARGENTINE AND CHILIAN EXPERTS,  
DATED 29<sup>TH</sup> AUGUST, 1898.

IN the city of Santiago, Chile, on the 29th day of August, 1898, the undersigned Experts Don Francisco P. Moreno for the Argentine Republic, and Don Diego Barros Arana for the Republic of Chile, having met in order to decide upon the general boundary line according to the Agreement arrived at in the Meeting of the 1st May, 1898, and in that which took place in the office of H.E. the President of the Republic of Chile on the 14th of May last, they respectively made the following statements :

The Chilean Expert said he had prepared the tracing of the general Chilean-Argentine frontier line in the Andes, stipulated in the Treaty of 1881, which he presents to his colleague in a map, together with a list enumerating the points inserted hereafter; that for the tracing of said line he had solely and exclusively followed the principle of demarcation established in Article I. of the Treaty of 1881, a principle which must also be the invariable rule of the proceedings of the Experts according to the Protocol of 1893; that consequently, the boundary line that he proposes runs along all the highest crests of the Andes which divide the waters, and constantly separates the *springs* \* of the rivers which belong to either country; that the same line leaves within the territory of each of the two nations the peaks, ridges or ranges, however elevated they may be, which do not divide the waters of the river systems belonging to each country; that, though in its most extensive and important parts, the ground over which the divisional line runs, has been sufficiently reconnoitred and even carefully mapped out, as has likewise been in general well established the geographical dependency of the rivers and streams which descend either side, he must nevertheless point out that the topographical location of the proposed line is wholly independent of the exactness of the maps, and that he therefore declares that said line is no other than the natural and effective dividing line of the waters of the South-American Continent, between parallels 26° 52' 45" and 52°, which can be demarcated on the ground without

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\* In the translation of the Minutes of the Proceedings of the Argentine and Chilean Experts, in this paragraph of Señor Barros Arana the word *slope* has been employed, which is a correct one in every case except this one, because Señor Barros Arana attributes another meaning to it.

effecting more topographical operations than are necessary for determining which would be the course of the waters there where they do not actually flow; that judging now all discussion to be useless, as he considers that the argumentation on both sides is exhausted, he proposes to his colleague the following proceeding in order that the Experts may in two, or at most three meetings, arrive at a definitive decision regarding the general line:

1. That the Argentine Expert should present his general line with a list enumerating the points or stretches, accompanied by sufficiently concrete and exact indications, so as to be able to recognise them on the ground by means of some natural circumstance;

2. That the general maps and the lists of points shall remain at the disposal of the Expert to whom they may have been presented, during the number of days which may be fixed by joint agreement before holding a second meeting;

3. That the Experts in said meeting shall respectively present to each other in writing:

- (a) A list of the points or stretches on which they mutually agree.

- (b) A list of the points or stretches on which they may not agree.

4. After the lists have been compared, explanations, observations or modifications may be made which either or both Experts might wish to introduce into his original proposal in view of the geographical data contained in the maps presented by his colleague, which shall be written down in the Record.

5. With these antecedents shall be formed two lists of points:

- (a) The list of points or stretches along which, by joint agreement, the Boundary Line between both nations remains settled.

- (b.) The list of points or stretches regarding which there being no agreement, the circumstance must be made known to the Governments for the ulterior ends foreseen by the Treaties.

These lists shall be read if necessary in a third meeting which shall be held at an interval of one or two days after the second; they shall be embodied in the Record, and a double copy of same shall be taken, to be signed by both Experts, in order to send them to their respective Governments, accompanied by the observations they may deem convenient, thus considering the presentation of the general line by the Experts as finally realised.

The description of the boundary line proposed by the Chilean Expert, and which at his request is inserted in the Record, is the following:

The points named pass San Francisco, mount San Francisco, portezuelo (gap) Incahuasi, mount Incahuasi, portezuelo (gap) Las Lozas, mount del Fraile, mount Del Muerto, snow-capped peak Ojos del Salado, marked in the map of the general frontier line with numbers 1 to 8, separate the Chilean slopes belonging to the hydrographic basin of river Salado de Chañaral from the Argentine hydrographic basin of river Colorado or Bermejo de La Rioja.

The points named mount Solo, mount Tres Cruces, mount Puntiaquito, portezuelo

(gap) Los Patos, mount Los Patos, pass Tres Quebradas, portezuelo (gap) Valle Ancho and mount Dos Hermanas, marked with numbers 9 to 16, separate the hydrographic basin of the Chilean river Salado de Chañaral from the Argentine basin of river Jahuel.

The points named portezuelo (gap) Arroyo Pampa, portezuelo (gap) Lagunillas, mount Vidal Gormaz, marked with numbers 17 to 19, separate the Chilean basin of river Salado from the Argentine basin of river Blanco-Jachal.

The points named portezuelo (gap) Vidal Gormaz, portezuelo (gap) Quebrada Seca, mount of the vegas of Quebrada Seca, portezuelo (gap) Quebrada Seca (South), portezuelo (gap) Pircas Negras, portezuelo (gap) Peñasco de Diego, portezuelo (gap) Come Caballos, mount Come Caballos, broken pass Peña Negra, pass Peña Negra, mount Caserones de la Linea, mount La Ollita, pass La Ollita or Ramadilla, mount Colorado and mount del Potro, marked with numbers 20 to 34, separate the Chilean basin of river Copiapó from the Argentine basin of river Blanco-Jachal.

The points named pass Macho Muerto, pass Del Inca, pass Rincón de la Flecha (landmark n. 3), pass Rincón de la Flecha (landmark n. 2), pass Rincón de la Flecha (landmark n. 1), unnamed, accessible point; pass La Flecha or Los Helados, portezuelo (gap) Los Tambos, snow-capped peak Los Tambillos, mount Toro, pass Valeriano, pass Soberado, pass Chollay, pass Los Amarillos, pass origin of river Potrerillos, pass Potrerillos, pass El Chivato, pass Guanaco Zonzo, gap which is the beginning of Quebrada Guanaco Zonzo, unnamed, accessible point, pass Sancarrón and pass Los Bañitos, marked with numbers 35 to 56, separate the Chilean basin of river Huasco from the Argentine basin of river Jachal.

The points named pass La Deidad, pass Vacas Heladas, mount Vacas Heladas, pass Las Tórtolas, mount Tórtolas, pass La Lagunita, mount Los Bañados, pass Agua Negra and mount Olivares, marked with numbers 57 to 65, separate the Chilean basin of river Coquimbo from the Argentine basin of river Jachal.

The points named pass La Gloria, portezuelo (gap) Empalme Cordillera Rio Blanco, mount San Andrés, accessible mount to the south of San Andrés, pass San Andrés, inaccessible mount Munizaga, pass Munizaga (eastern), unnamed, accessible mount, pass Munizaga (western) and portezuelo Vallecillo, marked with numbers 66 to 75, separate the Chilean basin of river Coquimbo from the Argentine basin of river Castaño (San Juan).

The points named pass Barahona, unnamed, accessible summit, pass Doña Resa, portezuelo (gap) La Coipita, pass Del Viento, pass Del Vientillo, unnamed, accessible summit, portezuelo (gap) Del Vientillo, unnamed, summit of difficult access, pass Guana, pass Del Portillo, pass Valle Hermoso, accessible mount, unnamed, and pass Los Azules, marked with numbers 76 to 89, separate the Chilean basin of river Limarí from the Argentine river Castaño (San Juan).

The points named pass Los Azules, pass La Laguna, and pass Azufre or Calderón, marked with numbers 89 to 91, separate the Chilean basin of river Limarí from the Argentine basin of river Santa Cruz (San Juan).

The points named pass Illapel and stretch of Cordillera, etc., marked with numbers 92



to 93, separate the Chilean basin of river Illapel from the Argentine basin of river Calingasta (San Juan).

The points named pass Puenteccillos, pass Los Pelambres, gap Del Pachon, pass Cerro Blanco, pass Mondaquita, pass Del Bonito, gap Alitre, pass Alitre, gap Rinconada del Yunque, gap Yunque, pass Las Ojotas, pass Mercedario, pass Las Gredas, pass Laguna del Pelado, pass Los Teatinos, gap Lagunas, gap Quebrada Grande, pass Quebrada Fría, gap Quebrada Fría, pass Las Llaretas, pass Golpe del Agua, pass Ortiz and pass La Honda, marked with numbers 94 to 116, separate the Chilean basin of river Choapa from the Argentine basin of river Calingasta (San Juan).

The points named gap Longomiche, pass Valle Hermoso, gap Quebrada Honda, pass Rubio and pass Leiva, marked with numbers 117 to 121, separate the Chilean basin of river Aconcagua from the Argentine basin of river Calingasta (San Juan).

The points named pass Los Contrabandistas, gap Lomas Coloradas, pass La Iglesia, pass Bermejo, gap Navarro and inaccessible stretch, marked with numbers 122 to 127, separate the Chilean basin of river Aconcagua from the Argentine basin of river Mendoza.

The points named snow-capped peak Del Plomo, pass Pircas, hill Rabicano, mount Juncal(?), gap Tupungato and mount Tupungato, marked with numbers 128 to 133, separate the Chilean basin of river Colorado (Maipo) from the Argentine basin of river Mendoza.

The points named mounts Los Piuquenes, gorge Los Piuquenes, volcano San José, pass Nieves Negras, gap Colina, mount Amarillo and mount Alvarado, marked with numbers 134 to 140, separate the Chilean basin of river Maipo from the Argentine basin of river Tunuyán.

The points named pass Alvarado (North), pass Alvarado (South), volcano Maipo, pass Maipo, gap Rio Bayo, pass Rio Bayo, gap Rio Bayo (Western), peaks Rio Bayo, gap Cruz de Piedra, and pass Cruz de Piedra, marked with numbers 141 to 150, separate the Chilean basin of river Maipo from the Argentine basin of river Diamante.

The points named pass de Molina, and hill Atravieso, marked with numbers 151 and 152, separate the Chilean basin of river Cachapoal from the Argentine basin of river Diamante.

The points named pass Las Leñas, and gap Las Lágrimas, marked with numbers 153 and 154, separate the Chilean basin of river Cachapoal (Rapel), from the Argentine basin of river Atuel.

The points named pass Las Damas and mount Torre de Santa Elena, marked with numbers 155 and 156, separate the Chilean basin of river Tinguiririca (Rapel) from the Argentine basin of river Grande.

The points named pass Santa Elena, pass Tiburcio, pass Vergara, pass Lagunas de Teno, pass Planchón, mount Planchón, mount Baños de Azufre, pass Deshecho, accessible stretch of Cordillera, pass Valle Grande, accessible stretch, pass Potrerillos, accessible stretch, pass Fierro, accessible stretch, pass Devia, pass Las Peñas, accessible Cordillera, pass Montañés, accessible pass Montañesito, mount Mora, pass Mora and pass Yeso, marked

with numbers 157 to 174 separate the hydrographic basins of the Chilean rivers, Teno, Maule, Colorado and Lontué from the basin of river Grande Argentino.

The points named pass Los Ángeles, accessible, pass San Francisco, accessible, pass Cajón Chico, pass Pichi-Trolon, pass Las Overas (North), pass Las Overas (South), pass Campanario, mount Campanario, pass Risco Bayo, pass Pehuenche and accessible point, marked with numbers 175 to 184, separate the Chilean basin of river Maule from that of river Grande Argentino.

The points named pass Guanaco, nameless summit, accessible, pass Laguna Negra, pass Barrancas, gap Sepúlveda, nameless summit, portezuelo Laguna Fea and nameless summit, marked with numbers 185 to 192, separate the Chilean basin of river Maule from that of river Barrancas (grande) Argentino.

The points named pass Portillo, pass Benitez, pass Puerta Vieja, pass Valdéz, pass Macho, unnamed, pass Saco, pass Dial, mount Matancilla, pass Catrinao and pass Los Piuquenes, marked with numbers 193 to 203, separate the Chilean basin of river Maule from the basin of river Neuquén.

The points named pass Cerro Colorado, pass Los Moscos, pass Zaña-Zaña, pass Las Diucas, accessible, pass Las Mariposas, accessible, pass Cajón Negro, pass Salitre, pass Pincheira, pass Lagunas de Epulafquen, pass Pajaritos and pass Buraleo, marked with numbers 204 to 214, separate the Chilean basin of river Ñuble from the Argentine basin of river Neuquén.

The points named pass Atacalco, Tábanos (Barbet), accessible point, pass Pichachen, pass Pinculebu and pass Copulhue, marked with numbers 215 to 219, separate the hydrographic basin of the Chilean river Laja from that of the Argentine river Neuquén.

The points named pass of Trapa Trapa, pass Copahue, volcano Copahue or Trolope, pass Pucon-Mahuida, pass Coliqueo, pass Collochue, pass Pulul, pass Rahue, pass Codihue and pass Pino Hachado, marked with numbers 220 to 229, separate the hydrographic basin of the river Bio-Bio from the Argentine basin of river Neuquén.

The points named pass Del Arco and pass Dicalma, marked with numbers 230 and 231, separate the Chilean basin of the river Bio-Bio from the Argentine basin of river Aluminé (Limay).

The points named mount Santa María, pass Llaimas, pass Ñellocahui, pass Reigolil, nameless summit, pass Coloco, pass Malalco, nameless summit, pass Rilul (1), pass Rilul (2), mount Rasgado, pass Huirinlil, mount Añihuerahui, pass Añihuerahui (1), pass Añihuerahui (2), mount Tres Picos, pass Truomen, ridge of Millalifen, pass Quilleihue, pass Mamuil-Malal, volcano Lanin and pass Paimun, marked with numbers 232 to 253, separate the hydrographic basins of river Tolten from the Argentine basin of river Limay.

The points named pass Quetru, mount Paimun, pass Carirriño, ridge Huahum, pass Ailliquina, pass Maipu, pass Chapelco, ridge Chapelco, pass Pilpil and mount Queñi, marked with numbers 254 to 263, separate the hydrographic basin of river Valdivia from the basin of the Argentine Limay river.

The points named nameless ridge, mount Del Mirador, pass Puyehue and mount



Pantojo, marked with numbers 264 to 267, separate the hydrographic basin of river Bueno from that of the Argentine river Limay.

The points named mount Esperanza, gap of Los Raulíes, pass Perez Rosales, mount Perez Rosales (1), and mount Perez Rosales (2), marked with numbers 268 to 272, separate the hydrographic basin of the Chilian river Petrohué from that of the Argentine river Limay.

The points named gap Barros Arana, mount Constitución, mount Catedral (1), peak Catedral (tower), mount El Morrito, pass Mascardi, summit mount Negro, mount Tristeza, mount Rayo, mount Ruinas de Bariloche (Norte), pass Del Manso and nameless mount, marked with numbers 273 to 284, separate the basin of river Puelo from that of the Argentine river Limay.

The point named mount Pico Quemado, marked with number 285; a stretch of mountain ridge, with number 286; pass Maiten with number 287; stretch of mountain ridge, with number 288; and the opening of Epuyen, with number 289, separate the hydrographic basin of the Chilian river Puelo from that of the Argentine river Chubut.

The Cordilleras Lelej and Esquel, the opening of Esquel, the gap Nahuel Pan, mount Thomas, opening Súnica, mount Teca, the opening of Lake Cronómetro, the Caquel ridge and mount Cuche, marked with numbers 290 to 298, separate the hydrographic basin of the Chilian river Fetaleufu from that of the Argentine river Chubut.

The two points denominated, nameless opening, marked with numbers 299 and 300, separate the hydrographic basin of the Chilian river Palena from that of the Argentine river Chubut.

The points denominated, nameless gap, with number 301, nameless accessible mountain 302, accessible nameless mountain 303, nameless accessible mountain 304, nameless point 305, and nameless accessible mountain 306, separate the hydrographic basin of the Chilian river Palena from that of the Argentine river Senguerr.

The points denominated rising ground without name, low point, unnamed, and nameless Cordillera, marked with numbers 307 to 310, separate the hydrographic basin of the Chilian river Cisne from that of the Argentine river Senguerr.

The points called nameless Cordillera 311, peak Katterfeld 312, accessible stretch, 313, bend of the Nirehuao 314, and swamp of Coihaique 315, separate the hydrographic basin of the Chilian river Aisen from that of the Argentine river Mayo (Senguerr).

The nameless point, western edge of the high tableland (meseta), marked with number 316, accessible stretch 317, and unnamed point 318, separate the hydrographic basin of the Chilian river Huemules, probably a tributary of the river Aisen, from that of the Argentine river Mayo (Senguerr).

The point 319, accessible space, separates the hydrographic basin of the river Fénix, that flows into lake Buenos Aires, from that of river Mayo (Senguerr).

The points named opening of Paricaique 320, and unnamed (foot of the tableland) 321, separate the hydrographic basin of the Chilian river Fénix from that of the Argentine river Deseado.



The points 322 to 323 comprise a large tableland 1500 metres high, which separates the hydrographic basin of the affluents of the Chilian lake Buenos Aires from that of the rivers Eque, Teique and Chacamaque.

The number 324, opening of Gillo, and the 325 stretch of high tablelands and mountain ridges, separate the waters that flow into the Cochrane lagoon and into two nameless lagoons, which are probably drained by Baker's channel in the Pacific from the Argentine streams Gillo and Olui that run towards the Atlantic.

Number 326, unnamed Cordillera, separates the waters of the slopes from which run the Chilian rivers that probably flow into the Pacific, through Baker's channel, from the slopes where begins the Argentine river Corpe or Chico which flows to the Atlantic.

Points 327 to 329 separate the waters of the affluents of lagoon Tar and Lake San Martín, which empty into the channels of the Pacific, from the affluents of the Argentine lake Obstáculo.

Number 330, a stretch of Cordillera, that separates the waters forming the Argentine stream Chalia from the slopes down which flow the tributaries of the lake San Martín which empties into the channels of the Pacific.

Number 331, Cordillera of Chalten, which separates the hydrographic basin of lake Viedma or Quicharre, that empties into the Atlantic through the river Santa Cruz, from the Chilian slopes that send their waters to the channels of the Pacific.

Number 332, Cordillera of Stokes, which separates the hydrographic basin of lake Argentino, which empties into the Atlantic through the river Santa Cruz, from the slopes down which flow the Chilian rivers which empty into the channels of Patagonia in the Pacific.

Points 333 to 335, named Cordillera, pass of Los Baguales and Cordillera of Baguales, separate the hydrographic basin of the slopes down which flow the waters of lakes Toro and Sarmiento and river Los Baguales, which empty into the Pacific from the slopes down which flow the waters that go to Lake Argentino and river Santa Cruz.

The points 336 to 342, named La Cumbre, Sepulcro, unnamed pass, unnamed pass, nameless hillock, nameless hillock, nameless hillock, and an unnamed point in the Pampa, separate the hydrographic basin of the rivers Vizcacha, Guillermo, Tres Pasos, tributaries of the lagoon Toro that empties into the bay of Última Esperanza, from the hydrographic basin of the river Coyle that flows into the Atlantic.

Cordillera Latorre 343, mount Barranco 344, unnamed pass 345, unnamed pass 346, unnamed hillock 347, point 348, which is the intersection of parallel 52°, separate the hydrographic basins of the Chilian rivers Guillermo and Tres Pasos, tributaries of the lagoon Toro, and slopes down which flow the waters that go into lake Balmaceda, which empties into the bay Desengaño, from the hydrographic basin of the rivers Turbio and Rubio, affluents of river Gallegos that flows into the Atlantic.

The Chilian Expert considers it opportune to record that the following points of the divisional line have been previously approved, and that therefore they should be considered as already fixed and accepted by both parties:

Placed by the first Sub-Commission :—

Numbers 37, 38, 39 of Rincón de la Flecha, erected the 15th of April, 1897; number 41 of La Flecha or Los Helados, the 15th of March, 1897; number 42 of Los Tambos, the 15th of April, 1897; number 45 of Valeriano, 46 of Soberado, 47 of Chollay, 48 of Los Amarillos, 49 beginning of river Potrerillos, 50 of Potrerillos, 51 of Chivato and 52 of Guanaco Zonzo, the 25th of March, 1897; number 53 beginning of the Quebrada del Guanaco Zonzo, and 54 accessible point between pass Sancarrón and that of Guanaco Zonzo, the 15th of April, 1897; number 55 of Sancarrón, 56 of Los Bañitos, 57 of La Deidad, 58 of Vacas Heladas, 60 of Las Tórtolas, and 62 of La Lagunita, the 14th of March, 1896. These landmarks have been definitely approved by the Experts as per record of proceedings of 22nd January, 1898.

Placed by the second Sub-Commissions :—

Number 122 Contrabandista, proposed by the Argentine Sub-Commission and accepted by the Chilean one, as per letter of 12th May, 1898; numbers 124 Iglesia, 125 Bermejo, 126 Navarro, 129 Pircas, 132 Tupungato, 135 Piuquenes, 137 Nieves Negras, 138 Colina, proposed by the Chilean Sub-Commission and accepted by the Argentine one, as per letter of 9th May, 1898; numbers 141 and 142 Alvarado (north) and Alvarado (south), erected as per record of 8th May, 1897; numbers 145 and 146 of Río Bayo, erected as per record of 7th May, 1897; numbers 149 and 150 of the Cruz de Piedra, erected as per record of 2nd May, 1897; number 151 Molina, as per record of 1st March, 1896; number 153 of Las Leñas, as per record of 4th March, 1895.

These landmarks have been definitely approved by the Experts, as is set forth in the records of 11th October, 1895, 5th of February, 1897, and 22nd January, 1898.

Placed by the third Sub-Commission :—

Numbers 155 Las Damas, and 157 Saint Elena, erected as per records of 8th and 18th March, 1894, and definitely approved by the Experts as per record of the 15th October, 1895.

Placed by the fourth Sub-Commission :—

Number 235 Reigolil, erected as per record of 24th February, and number 237 Coloco, as per record of 27th March, 1895.

These landmarks have been definitely approved by the Experts, as per record of 18th October, 1895.

Finally, the Chilean Expert must point out that although he considers that the data in his power are sufficient to establish that the rivers Futaleufu and Pico, as well as lakes Buenos Aires, Cochrane and San Martín, empty toward the Pacific Ocean, the courses of these outlets have not been directly explored as yet, and he is willing to take into account whatever data the Argentine Expert might furnish him regarding same.

The Argentine Expert replied: That before deciding upon the various points contained in his colleague's statement, he required some explanations as to the part which refers to the tracing of the line, which said that, "For the tracing of said line he had solely and exclusively followed the principle of demarcation established in Article I. of the Treaty of



1881, a principle which must also be the invariable rule of proceeding of the Experts according to the Protocol of 1893."

He thinks it indispensable that it should be set forth in the Records of these conferences that both Experts declare that the points of the general frontier-line which they are about to propose, discuss and decide upon, are situated in the Cordillera de los Andes, thus fulfilling the provisions of Article I. of the Treaty of 1881, of Articles I. and II. of the Protocol of 1893, and of Article V. of the Chapter 'Preliminary Operations' of the 'Instructions for the Demarcation in the Cordillera de los Andes,' given by the Experts on the 1st of January, 1894, and of the bases I., III. and VI., of the Agreement of 1896; and, as regards the boundaries in parallel 52°, the provisions of Article II. of the Treaty of 1881, Article II. of Protocol of 1893, and Bases III. and V. of the Agreement of 1896.

The Chilean Expert replied that before giving the explanations asked for by the Argentine Expert, he wishes the latter to acquaint him with his general map of demarcation, which will afford an opportunity of also asking him for the explanation which he may deem convenient regarding the principles on which he may have founded same.

The Expert of the Argentine Republic replied that he would give the explanations desired by the Chilean Expert as soon as it was formally recorded that they proceed in the discussion according to what had been proposed by him in the foregoing paragraph.

The Chilean Expert replied that he had no difficulty in declaring that the tracing of the general line proposed by him is in accordance with the provisions of the Articles of the Treaties and Agreements quoted by the Argentine Expert.

The Argentine Expert said that the general frontier-line, which he would propose further on, was situated in the central chain of the Cordillera de los Andes, which is no other than that which contains the elevated crests referred to by the Treaty of 1881, and the main range of the Cordillera de los Andes mentioned in the Protocol of 1893.

He added :

1. That he thinks, as the Chilean Expert does, that it is not the moment to enter into lengthy discussions, though he believes that arguments are not exhausted on both sides, and he accepts the proceeding indicated by his colleague, except that which refers to the limit of "two, or three meetings at most," in order to arrive at a definite decision of the Experts regarding the general frontier-line.

2. That in the next meeting he will present his general line, with the list enumerating the points referred to in the first proposal, regretting that his ill-health in these last days had prevented him from formulating it to-day, and he advises that he will not be able to present now to his colleague the indications analogous to those mentioned by him, referring to the points and stretches of the line which he has proposed to him, because he expects these data by next mail, via Magallanes, as it had not been possible to bring them with him on account of their not being ready when he left Buenos Aires.

3. That he will accompany the enumeration of the points of the line, which he will propose to the Chilean Expert, with some remarks suggested by the statement of said Expert.



4. That he accepts the second proposal, but forewarns him that he will be unable to present a general map like that of the Chilian Expert before four days from date, in the part of the Cordillera de los Andes comprised between parallels  $38^{\circ}$  and  $52^{\circ}$ , and four days afterwards that of the region comprised between parallels  $23^{\circ}$  and  $38^{\circ}$ ; but that he has no difficulty in placing at the disposal of his colleague, in the office of the Argentine Commission, the partial sheets of a map on a scale of 1 : 200,000, hoping that he on his part may be able to examine in the Chilian office the partial sheets which had served for the preparation of the general map.

5. That in a meeting, the date of which would be fixed of joint accord by the Experts, he will present :

- (a) The list of points or stretches on which the Experts agree with each other.
- (b) The list of points or stretches on which they do not agree.

6. He accepts proposal 4.

7. He accepts proposal 5.

8. He thinks it indispensable, and he proposes to the Chilian Expert, that they should exchange reproductions, photographic or otherwise, of the partial maps that may have served them for tracing the general line proposed by each of them, these reproductions to have the indication of points and stretches of said lines.

9. They shall likewise exchange reproductions of the same maps, with clear and evident marks of the points or stretches of the general frontier-line on which the Experts may have mutually agreed, and also similar reproductions in which shall be marked the points or stretches on which they disagree.

10. After the comparison referred to in proposal 4 has been made, the modifications which may have been introduced in the tracing of the general line by both Experts in their respective lines shall be recorded in reproductions of said maps.

11. After fulfilment of what is provided in proposal 5, the following shall be recorded in reproductions of said maps :

- (a) The general line of points or stretches which of joint accord may have been fixed as the divisional line between the Argentine Republic and that of Chile.
- (b) The line of points or stretches regarding which there being no agreement, the circumstance must be made known to the Governments for the ulterior ends foreseen by the Treaties.

12. They shall draw up and submit to their Governments for their decision, conformably with the Agreement of 1896, special Records containing the line proposed by both Experts as divisional line in the Cordillera de los Andes between parallels  $23^{\circ}$  and  $26^{\circ} 52' 45''$ ; and comprising the proposed lines, those rejected and those accepted in the full extension or in part of them, accompanying same with reproductions of the same maps which contain the specification of the different lines.

13. They shall likewise draw up a Record, in which it shall be set forth that the Experts have fulfilled the provisions of the latter part of Article II. of the Protocol of 1893 and of the bases III. and VI. of the Agreement of 1896, and the decision they may adopt. At the same time they shall exchange reproductions of the maps in which may have been

traced the divisional lines, the adoption of which is to be proposed by them, should the case foreseen in said Protocol and Agreement arise.

14. The lists referred to in the last paragraph of proposal 4 shall be read in the meeting decided on by the Experts, and shall be embodied in the Record, two copies of which shall be made and signed by both Experts, and remitted to their respective Governments, accompanied with the observations they may deem convenient, and with the various reproductions of the maps which they may have had in view on taking their decisions, and in which they shall separately mark the points or stretches referred to by paragraphs (a) and (b) of the same proposal.

15. The resolutions Numbers 12 to 13 shall be adopted before beginning to decide upon the general frontier line in the Cordillera de los Andes between parallels  $26^{\circ} 52' 45''$  and  $52^{\circ}$ , and shall be submitted immediately to the Governments.

16. The reproductions of all the maps referred to in this general Record shall represent the ground of the demarcation on a scale not less than 1:400,000 and shall be signed by both Experts. If these reproductions are photographic, they shall be replaced within a term not exceeding three months by manuscript copies on paper or canvas.

17. The foregoing having been done, the presentation of the general frontier-line between the Argentine Republic and the Republic of Chile by the Experts shall be considered terminated.

18. In a special Record the Experts shall determine the form and time for the joint Sub-Commissions to begin the actual demarcation in detail on the ground, of the accepted points, in order to define the frontier-line, placing divisional landmarks in all the passes and accessible points of the mountains situated on said line, and drawing up a Record of the operation, in which it shall be stated that they proceed to erect said landmarks by express order of the respective Experts.

The assistants of said joint Sub-Commissions shall reproduce in their Records the pertinent parts of the agreements of the Experts regarding the general frontier-line, for which purpose the Experts shall deliver to their assistants a copy of the maps in which are marked the approved points or stretches of the boundary line.

19. The landmarks to be placed in future on the boundary line, as well as those which are to replace the provisional ones already approved, shall be constructed with stone and cement or iron, and shall be placed so that their principal sides are directed toward the frontier, inscribing on the respective sides the names of the countries which they separate.

20. He adds, to end his reply to the statement of the Chilean Expert, that he considers already fixed as points of the frontier-line, in which provisional landmarks have been erected, and definitely approved—the points mentioned in pages 65 and 66 of this book of Records.

The Experts drew up and signed the present Record in two copies.

F. P. MORENO.

DIEGO BARROS ARANA.

ENRIQUE S. DELACHAUX.

ALEJANDRO BERTRAND.

## RECORD OF THE PROCEEDINGS

## OF THE MEETING OF

## THE ARGENTINE AND CHILIAN EXPERTS,

DATED SETEMBER 1<sup>ST</sup>, 1898.

IN the city of Santiago, Chile, on the 1st day of September, 1898, the undersigned Experts, Don Francisco P. Moreno, for the Argentine Republic, and Don Diego Barros Arana, for the Republic of Chile, having met in order to decide upon the general boundary line, according to the agreement arrived at in the Meeting of the 1st of May, 1898, and in that which took place in the office of H.E. the President of the Republic of Chile, on the 14th of May last, they respectively stated as follows :

The Expert of the Argentine Republic :

1. That in accordance with paragraph 13 of his statement, set forth in the Record of the 29th August last, and the agreement arrived at in the meeting which took place on the 1st of May of last year, to carry out the provisions of the last part of Article II. of the Protocol of 1st of May, 1893, and of Clause III. of the Agreement of 17th April, 1896, the fifth Argentine Sub-Commission of demarcation had effected the surveys ordered by the Experts on the 28th of April, 1897, to investigate if the case foreseen in said Protocol and Agreement had arisen, and with them to enable the Experts to comply with what is provided in said covenants.

2. That in view of said surveys, and the observations he has personally made on the ground, he declares that he has the firm conviction that, in fact, the Cordillera de los Andes is found penetrating into the channels which really exist in the peninsular part of the south on nearing parallel 52°, and that the waters of those channels wash coasts of lands which do not belong to the Cordillera de los Andes, which lies to the west of said channels.

3. That the geographical fact of the existence of plains to the east of the salt-water channels, situated to the east of the Cordillera de los Andes, had been verified in 1557 by Pilot Ladrillero; in 1830 by the British hydrographers Skyring and Kirke, during the expedition of the 'Beagle'; in 1877 by the lieutenant of the Chilian Navy, J. T. Rogers, and the Chilian naturalist Enrique Ibar; and in 1885 by the Chilian civil engineer Alejandro Bertrand, who said that it is shown in an irrefutable manner that in latitude 52° S. the Cordillera de los Andes sheds all the water from its slopes into the Pacific.



4. That he requires to know the opinion of the Chilian Expert on this point, so that, if both agree on same, they may proceed to fulfil what is ordered in said Protocol and Agreement.

The Chilian Expert said :

That as regards the statement made by his colleague with reference to the Cordillera de los Andes penetrating into the channels of the Pacific in the vicinity of parallel 52°, he agrees with his appreciations in so far as they may apply to several elevated mountain regions of the Cordillera de los Andes ; but not to the totality of same, because other branches of same extend over the Continent toward the north of the estuary of Última Esperanza.

He adds that he does not give to the expressed proposition the character of prior importance, because the survey of the ground made by the Chilian Commission to fix a divisional line leaving to Chile the *coasts of said channels*, leads him to the conclusion that the natural interior delimitation of said coasts is no other than the one of the hydrographic basin which empties into them ; that this limit is at the same time that which agrees best with the spirit of the Treaty of 1881 ; and that, in consequence, he has included it in this form in the proposal of the general line presented to his colleague, in order that should he not accept same, it may be considered by the Governments as the result of the surveys made by him, which are to serve as a basis for the resolution of the Arbitrator who is to decide on the divisional line in that region, according to what is stipulated in the last part of the 3rd Clause of the Agreement of 1896.

The Argentine Expert having stated that in his opinion a separate Record on this subject should be presented to the Governments, the Chilian Expert reproduced the following detail of the line alluded to in the preceding paragraph :

Stretch of Cordillera which separates the slopes which descend into the southern bay of lake Argentino, from those which descend into the small lagoons lying north of the Cordillera of Payne ; pass of Los Baguales ; watershed of the Cordillera de los Baguales, between the slopes (which feed) the tributary streams of lake Argentino and those which feed river Los Baguales. The spot named Cumbre Sepulcro in the Cordillera of Las Vizcachas ; watershed between the river Vizcachas, Guillermo and Tres Pasos, tributaries of Lake Toro or Maravilla which empties into the estuary of Última Esperanza, and the hydrographic basin of river Coyle which empties into the Atlantic.

The Cordillera Latorre, mount Barranco, nameless passes, nameless hillocks, point of parallel 52°, along the watershed which separates the hydrographic basins of the rivers Guillermo and Tres Pasos, and the slopes which descend into Lake Balmaceda and Bay Desengaño, on the Pacific side, from the hydrographic basins of the rivers Turbio and Rubio, affluents of river Gallegos, on the Atlantic side.

The Expert of the Argentine Republic stated that :

Considering that in the present case they must adopt as frontier-line between the

Argentine Republic and the Republic of Chile, a line leaving to Chile the coasts of the channels of the Pacific existing in the peninsular part of the south to the east of the Cordillera de los Andes according to what is provided in the Protocol of 1893,—a line analogous to the one agreed upon by the Experts and approved by the respective Governments between mount Dinero and mount Aymond, as set forth in the Record of the 5th joint Sub-Commission, dated 8th of January and 15th of April, 1896, and in that of the Experts dated 28th of April and 6th of May, 1897, and 22nd of January, 1898, he proposes that said line shall start from landmark XLII., provisionally marked by the Argentine Sub-Commission, shall follow northward along the southern affluent of river Tranquilo which flows to the north, close to said landmark, until it strikes river Tranquilo; and shall continue along the river Tranquilo until reaching the small lagoon from which said river issues; shall cut said lagoon in the direction of the stream which flows into it on the north, and which issues in its turn out of a second small nameless lagoon into which empties Edelmiro stream. The divisional line shall follow along this stream till it leaves the line of glacial hillocks which bound on the north the plains of Diana; it shall continue along the border of said hillocks as far as the south-westerly point of the Dorotea tableland, and thence in a north-westerly straight line passing between the La Cueva lagoon and the Consuelo Creek, until reaching the confluence of river Geikie with river Serrano. It shall follow said river Geikie until it strikes the slopes of the crest line of the main range of the Andes.

Both Experts, in view of the divergences recorded in the present statements, resolved to present to their respective Governments a copy of the present Record for the ulterior ends.

The Experts drew up and signed the present Record in two copies.

F. P. MORENO.

DIEGO BARROS ARANA.

ENRIQUE S. DELACHAUX.

ALEJANDRO BERTRAND.

## RECORD OF THE PROCEEDINGS

OF THE MEETING OF  
THE ARGENTINE AND CHILIAN EXPERTS,  
DATED SEPTEMBER 1st, 1898.

In the city of Santiago, Chile, on the 1st day of September, 1898, the undersigned Experts, Don Francisco P. Moreno for the Argentine Republic, and Don Diego Barros Arana for the Republic of Chile, having met in order to decide upon the general boundary line, according to the Agreement arrived at in the Meeting of the 1st of May, 1898, and in that which took place in the office of H. E. the President of the Republic of Chile on the 14th of May last, they respectively stated as follows:

The Expert of the Argentine Republic stated:

1. That the general line which he proposes to his colleague is wholly comprised within the Cordillera de los Andes.

2. That in its entire extent it passes between the slopes which descend one side and the other of the main range.

3. That he considers that said main range is constituted by the predominating edge of the principal and central chain of the Andes, considered such by the first geographers of the world.

4. That this principal chain is the most elevated, the most continuous, with most uniform general direction, and its flanks shed the larger volume of waters, thus presenting the conditions established both by the Treaty of 23rd of July, 1881, and by the Protocol of 1st May, 1893, to constitute with the crest line of its slopes, the general frontier line between the Argentine Republic and the Republic of Chile.

That according to the text of paragraphs 12 and 15 of his statement set forth in the Record of the 29th of last August, and to what had been decided at the meeting of the Experts held on the 1st of May of last year, he proposes to his colleague in compliance with the provisions of base number 1 of the Agreement of 17th of April, 1896, the following general boundary line in that part of the Cordillera de los Andes situated between parallels 23° and 26° 52' 45" latitude S. He considers that said line strictly follows the terms of Article I. of the Treaty of the 23rd July, 1881, and of Articles I. and II. of the Protocol of 1st May, 1893, and he declares that he projects it according to the surveys made in said region of the Cordillera de los Andes by the 6th Argentine Sub-Commission, which has carried out all the investigations referred to in Article 5 of the chapter of instructions



issued by the Experts on the 1st of January, 1894, for the demarcation in the Cordillera de los Andes in pursuance of the instructions imparted to the joint Sub-Commission on the 17th of February of last year. That in proposing this line he has borne in mind the Treaty concluded by the Argentine Republic and the Republic of Bolivia, on the 10th of May, 1889, exchanged on the 17th of May, 1893, with modifications introduced in the first Article, the Boundary Treaties between the Republic of Chile and the Republic of Bolivia on the 10th of August, 1866, and on the 6th of August, 1874, and the Record of the Commission entrusted to fix the boundaries between the Chilian and Bolivian territories, signed on the 10th of February, 1870, in the Port of Antofagasta by Señores Amado Pissis and Juan Maria Mujia.

The general boundary line between parallels  $23^{\circ}$  and  $26^{\circ} 52' 45''$  which he now proposes, is wholly situated in the Cordillera de los Andes in its main range, constituted in said part of the same Cordillera by the line of high crests which really and effectually exists, and which "separated Chile from the high tableland or Puna Boliviana of Atacama," and "consecrated the traditional limit," as declared by the Chilian Expert to my predecessor, the Expert of the Argentine Republic, Don Octavio Pico, in his note of 18th of January, 1892.

This general line shall start from the point in which parallel  $23^{\circ}$  of latitude S., crosses the edge or culminating line which separates the slopes of the main range of the Cordillera de los Andes, which in that part is the "Real Cordillera of the Andes," and the "high Cordillera de los Andes," as studied by the Chilian engineers Don Francisco San Roman and Don Santiago Muñoz. Departing from this point southward, it shall pass by :

The edge (No. 1 of the Argentine map) which from mount Tonar, Tocar, Tenar, or Toco, lying to the north of said parallel extends to mount Honar (4) passing between the mounts Niño and Putana or Puta (2 and 3) lying to the east and a nameless volcano of symmetrical form, mounts Áspero, Bordos Colorado, and at some distance from mounts Zarzo and Zapa, all lying to the west.

From the Honar the line shall continue along the edge or crest as far as mount Potor (5), opening of Potor (6), mount Colache (7), mount Abra Grande (8), mount Volcán (9), Barrial (10), Lejía (11), Overo (12), Agua Caliente (13), mount Puntas Negras to the south of Agua Caliente (14), rising ground near Laguna Verde (15), mount Miñiques (16), Puntas Negras (17), mount Cozor (18), Media Luna de Cozor (19), mount Capur (20), mount Cobos (21), ridge from Capur to the opening of Pular—Punto 4740—(22), thence by the crest to mount Pular (23), point 4780 (24), mount Salina (25), rising ground of the east of Socompa opening—4380—(26), rising ground Del Oeste (27), mount Socompa (28),—point 4240—(29), mount Socompa Carpis (30), mount Tecar (31), principal point of the ridge of mountains between Tecar and mount Inca (31 to 35), mount Inca (36), opening Zorra Vieja—4440—(37), mount Llullaillaco (38), gap of Llullaillaco—4920—(39), Corrida de Cori (40), volcano Azufre or Lastarria (41), ridge Del Azufre or Lastarria up to mount Bayo of same (42 to 47),—point 4970—(48), mount Agua de la Falda (49), mount Agua Blanca (50), mount Parinas (51), mount Morado (52), mount Del Medio (53), mount Peinado Falso (54), point XXVI. (55),—point 5134—(56),

mount Laguna Brava (57), mount Juncalito I. (58), Juncalito II. (59), Juncal or Wheelwright (60), Pirca de Indios at the foot of Juncal or Wheelwright (61).

Within the above indicated points, the assistants of the 6th Sub-Commission are to make the practical demarcation in detail, according to what is provided in Article V. of the Instructions given by the Experts for the demarcation in the Cordillera de los Andes on the 1st of January, 1894.

The Chilean Expert replied that he would give later on his reasons for not at present discussing the line presented by the Argentine Expert between parallel 23° and mount Juncal or Wheelwright, waiting before doing so for his colleague to finish the presentation of his general boundary line.

The Experts have drawn up and signed the present Record in two copies.

F. P. MORENO.

DIEGO BARROS ARANA.

ENRIQUE S. DELACHAUX.

ALEJANDRO BERTRAND.

## RECORD OF THE PROCEEDINGS

OF THE MEETING OF  
THE ARGENTINE AND CHILIAN EXPERTS,  
DATED SEPTEMBER 1ST, 1898.

IN the city of Santiago, Chile, on the 1st day of September, 1898, the undersigned Experts Don Francisco P. Moreno for the Argentine Republic, and Don Diego Barros Arana for the Republic of Chile, having met in order to decide upon the general boundary line, according to the Agreement arrived at in the Meeting of the 1st of May, 1897, and in that which took place in the office of H. E. the President of the Republic of Chile on the 14th of May last, they respectively made the following statements :

The Chilian Expert, without objecting to any of the general ideas contained in the propositions numbers 8, 9, 10, 11, 14 and 17 of the Argentine Expert, and wishing at the same time to consult the right which each Expert has to preobtain the documents which he may deem necessary in order to report to his Government regarding the presentation of the general frontier-line made by his colleague, and also the greatest liberty of action of both, proposes to modify, as follows, the part referring to the exchange of copies of map.

Each Expert places from this moment at the disposal of his colleague in the respective office, all the general and detailed maps which he may be able to dispose of and which may have served him for proposing his general line, in order that he may see to their being consulted, copied or reproduced in the form he may consider most convenient. They engage to authorise with their signature every copy or reproduction duly collated.

Concerning propositions 12, 13, 15, 16, 18 and 19, he reserves his resolution regarding same until the meeting alluded to in the fifth proposition of the Argentine Expert shall take place.

The Argentine Expert stated that he had no objection to accept the modification proposed by the Chilian Expert referring to the exchange of the maps.

The Experts drew up and signed the present Record of proceedings in two copies.

F. P. MORENO.

DIEGO BARROS ARANA.

ENRIQUE S. DELACHAUX.

ALEJANDRO BERTRAND.



## RECORD OF THE PROCEEDINGS

OF THE MEETING OF  
THE ARGENTINE AND CHILIAN EXPERTS,  
DATED SEPTEMBER 2ND, 1898.

IN the city of Santiago, Chile, on the 2nd day of September, 1898, the undersigned Experts Don Francisco P. Moreno for the Argentine Republic and Don Diego Barros Arana for the Republic of Chile, having met for the purpose of deciding upon the general boundary line, according to the agreement arrived at in the Meeting of the 1st of May, 1897, and in that which took place in the office of H. E. the President of the Republic of Chile on the 14th of May last, and wishing to harmonise the desires of both in order to resolve simultaneously all the questions regarding the general line and the stretches separately considered by the Argentine Expert, have agreed as follows :

To exchange in the morning of the 3rd September all documents referring to the presentation of said lines by either side, and to hold on the same day a meeting in order to sign the Records of the proceedings in which the presentations are recorded, as soon as the copies of said documents have been made in the respective Record-books.

In that meeting the date shall also be fixed for the holding of the other meeting in which shall be formulated the lists of points of agreement and disagreement.

The Experts drew up and signed the present Record of the Proceedings in two copies.

F. P. MORENO.

DIEGO BARROS ARANA.

ENRIQUE S. DELACHAUX.

ALEJANDRO BERTRAND.

# RECORD OF THE PROCEEDINGS

OF SEPTEMBER 3RD, 1898.

## GENERAL FRONTIER-LINE ARGENTINE PROPOSAL.

IN the city of Santiago, Chile, on the 3rd day of September, 1898, the undersigned Experts Don Francisco P. Moreno for the Argentine Republic and Don Diego Barros Arana for the Republic of Chile, having met in order to decide upon the general frontier-line according to what had been agreed upon in the Meeting of the 1st of May, 1897, and in that which took place in the office of His Excellency the President of the Republic of Chile on the 14th of May last,

The Argentine Expert stated :

That the general boundary line between parallel  $26^{\circ} 52' 45''$  and the culminating point of the main range of the Cordillera de los Andes, in which line the river Geikie rises in parallel  $51^{\circ} 21'$ , shall run along the following points or stretches :

Pirca de Indios—of the Argentine plan (1), mount del Cenizo (2), mount Tres Cruces (3), mount Lamas (4), gap Los Patos (5), mount Los Patos (6), pass of Aguita (7), mount Aguita (8), mount Tres Quebradas (9), pass Tres Quebradas or Toro Muerto (10), Valle Ancho (11), stream Pampa (12), gap Lagunilla (13), mount Lagunilla or Vidal Gormaz (15), Quebrada Seca Norte (16), mount Vegas Quebrada Seca (17), Quebrada Seca Sur (18), pass Peñasco de Diego (19), pass Pircas Negras (20), pass Come Caballo (21), mount Come Caballo (22), pass Deshecho de Peña Negra (23), mount Caserones de la Ollita (24), mount La Ollita (25), pass La Ollita or Ramadilla (26), mount Colorado (27), mount Potro (28), accessible point of river Mogotes (29), accessible point of stream Macho Muerto (30), pass Macho Muerto (31), pass Inca (32), pass Rincón de la Flecha (33), landmark No. III., pass of Rincón de la Flecha, landmark No. II. (34), pass of Rincón de la Flecha, landmark No. I. (35), accessible unnamed spot western declivity of mount La Flecha or De los Helados (36), pass La Flecha or De los Helados (37), gap Los Tambos (38), snow-capped peak of Tambillos (39), mount Toro (40), pass Valeriano (41), pass of Soberado (42), pass of Chollay (43), pass of Los Amarillos (44), pass of the beginning of river Potrerillos (45), pass of Potrerillos (46), pass of Chivato (47), pass of Guanaco Zonzo (48), beginning of the Quebrada Guanaco Zonzo (49), accessible unnamed point between the pass of Sancarrón and that of Guanaco Zonzo (50), pass of Sancarrón (51), pass of Bañitos (52), pass of La Deidad (53), pass of Vacas Heladas

(54), mount Vacas Heladas (55), pass of Las Tórtolas (56), mount Tórtolas (57), pass of La Lagunita (58), mount Los Bañados (59), pass of Agua Negra (60), snow-capped peak of Porongos or Olivares (61), gap Agua Negra (62), pass of Quebrada Colorada (63), gap of Río Blanco (64), pass of San Lorenzo (65), pass of Río Seco (66), pass of Vallecito (67), gap Ternero (68), pass of Varona (69), pass of Santa Rosa (70), pass of Castillo (71), pass of Miranda (72), pass of Viento (73), pass of Vientecillo (74), pass of Guana (75), pass of Portillo (76), pass of Valle Hermoso (77), pass of Delgado (78), pass of Delgadito (79), pass of the beginning of stream Azules (80), pass of Azules (81), pass of Gordito (82), pass of Verde (83), pass of La Salina (84), pass of La Coipa (85), passes of La Laguna de la Overa (86 and 87), pass of Palacios (88), pass of Vacas Muertas (89), pass of Soberado (90), pass of Araya (91), pass of Calderón (92), pass of Azufre Norte (93), pass of Azufre Sur (94), pass of Río Negro (95), pass of Los Burros (96), pass of Las Tres Quebradas de Illapel (97), pass of Portillo (98), pass of La casa de Piedra (99), pass of Los Leones (100), pass of the beginning of stream Leones (101), pass of Chalinga (102), pass of Pachón (103), pass of Mondaca (104), pass of Salitre (105), pass of Yunque (106), pass of La Ojota (107), pass of Mercedario (108), pass of Cencerro or Gredas (109), pass of Laguna Pelada (110), pass of Los Teatinos (111), pass of the river Las Llaquetas (112), pass of Portillo (113), pass Valle Hermoso (114), gap Quebrada Honda (115), pass Rubio (116), pass Leiva (117), pass Volcán (118), pass of Las Cuevas (119), gap Contrabandistas (121), gap Escondido (122), pass Iglesia (123), pass Bermejo (124), gap Navarro (125), inaccessible stretch (126), mount Plomo (127), pass of Pircas (128), Morado gap (129), mount Chimbote (130), mount Las Polleras (131), gap Tupungato (132), mount Tupungato (133), volcano Bravard (134), ridge of Piuquenes (135), mount Piuquenes (136), gap of Piuquenes (137), mount Maronlejo (138), volcano San José (139), pass of Nieves Negras (140), pass of Colina (141), snow-capped peak (142), mount El Gorro (143), mount Amarillo (144), mount Alvarado (145), pass of Alvarado Norte (146), pass of Alvarado Centro (147), pass of Alvarado Sur (148), volcano Maipo (149), pass of Maipo (150), eastern gap of river Bayo (151), pass of river Bayo (152), western gap of river Bayo (153), mount river Bayo (154), gap of Cruz de Piedra (155), pass of Cruz de Piedra (156), pass of Molina (157), mount Atravieso (158), pass of Las Leñas (159), gap of Las Lágrimas (160), pass of Las Damas (161), mount Santa Helena (162), pass of Santa Helena (163), pass of Tiburcio (164), pass of Vergara (165), pass of the lagoons of the Planchón or Teno (166), pass of Planchón (167), mount El Planchón (168), mount Baños Azufre (169), mount Peteroa (170), mount Del Peñón (171), pass of Valenzuela (172), pass of Valle Grande (173), pass of Potrerillo (174), pass Del Fierro (175), pass Devis (176), pass Las Peñas (177), pass Montañeces (178), pass Montañecito (179), mount Mora (180), pass of Mora (181), pass Del Yeso (182), pass of Los Ángeles (183), pass of San Francisco Norte (184), pass of San Francisco Sur (185), pass Cajón Chico (186), pass Trolon (187), pass Trolon Centro (188), pass of Pichi-Trolon (189), pass of Las Overas (190), pass of Cajón Grande (191), mount Campanario (192), pass Campanario (193), pass Maule or Pehuenche (194), pass Guanaco (195), nameless summit (196), pass Laguna Negra (197), pass Barrancas (198),



gap of Sepúlveda (199), gap of Laguna Fea (200), nameless summit (201), pass Portillo (202), pass of Benitez or Puerta Nueva (203), pass Puerta Vieja (204), pass Valdez (205), Pass Macho (206), nameless accessible point (207), pass Del Saco (208), pass Dial or Chañas (209), mount Matancilla (210), pass Catrino (211), pass Piuquenes (212), pass Cajón or Cerro Colorado (213), pass Marcos (214), pass Zaña-Zaña (215), pass Diucas (216), pass Mariposas (217), pass Cajón Negro (218), pass Lumabia or Salitre (219), pass Pincheira (220), pass of Laguna Epulauquen (221), pass of Pajaritos (222), pass of Buraleo (223), pass of Columpio (224), pass of Atacalco (225), accessible point Tábanos (226), pass Buta Mallin (227), pass of Pichachen (228), pass Picunleo (229), pass Copulhue (230), pass of Trapa Trapa (231), mount Chanchoco (232), pass Copahuitos (233), pass Copahue (234), mount Copahue (235).

At mount Copahue the main range of the Cordillera or its central chain trends southward and cuts the river Bío Bío. The Expert of the Argentine Republic declares that abiding strictly by the letter of the Treaty of 1881 and Protocol of 1893, on marking off on the ground the divisional line, said line should cut the river Bío Bío, because he considers that the mountains lying to the east of the upper course of the river do not correspond with the main range of the Cordillera de los Andes, but that, actuated by reasons of justice and equity, he accepts the line which starting from mount Copahue is proposed by the Chilean Expert, which line includes the passes of Pucon-mahuida (236), Coliquen (237), Collochué (238), Pulul (239), Rahue (240), Codihue (241), Pino Hachado (242), El Arco (243), Ycalma (244), up to the pass of Santa María (245), which is comprised within the central chain or main range of the Andes, thus leaving the upper valley of river Bío Bío in territory of the Republic of Chile. He declares that by proceeding thus, he does so in exercise of the attributions of his office, and takes into account that when the Boundary Treaty was signed, it was the general belief in Chile, based on official documents, that this valley lay west of the edge or culminating line of the Cordillera or main range of same, and therefore in Chilean territory.

The Expert of the Argentine Republic considers it his duty to aim at a satisfactory, equitable and just manner of defining the line which his Government has entrusted him to trace, grounded on the letter and spirit of the Treaty of 1881 and on the idea which has led to this arrangement and to the subsequent ones which determine said line,—bearing also in mind the state of the knowledge of the topography of the Cordillera de los Andes in the years when said Covenant was negotiated and signed.

At that time the general watershed of the Cordillera was considered inseparable from the latter's central or prevailing chain; and the crest thereof, that is to say, of the snow-capped chain of the historians and geographers of all times was for the signatories of the Treaty of 1881 and for those who accepted it, the only international boundary, although they knew that this chain was crossed, not only in one but in several cases, by rivers having their sources to the east of same.

He declares likewise that the acceptance on his part of the boundary line between the volcano Copahue and the pass of Santa María for the reasons stated, cannot and should not

establish a precedent when deciding other points of the same divisional line. The line from the Santa María pass shall continue through the pass of Llaimas (246), pass of Nellocahui (247), pass of Reigolil (248), nameless summit (249), pass of Coloco (250), pass of Malalco (251), pass of Rilul No. 1 (252), pass of Rilul No. 2 (253), mount Razgado (254), pass of Huirinlil (255), mountain to the north of Añihuerahui (256), pass of Añihuerahui No. 1 (257), pass of Añihuerahui No. 2 (257 A), pass Tromen (258), pass Mamuil-malal (259), volcano Lanin (260), pass Paimun (261), pass Quetru (262), mount Paimun (263), pass Carirriño (264), nameless mountain 2170 metres (265), mount Perihueico (266).

Up to this point the divisional line, from mount Santa María, has followed the line between the slopes of the principal chain or main range of the Andes, without cutting rivers, but, at the foot of mount Perihueico flows the river Huahum, which drains the lakes Lacar and Nontué lying east of the main range of the Cordillera de los Andes, and, therefore, the divisional line shall cut the river Huahum in conformity with the provisions of Article I. of the Protocol of 1st May, 1893.

The divisional line shall cut the river at the confluence of the Mahihuen stream (267), shall follow this stream up to the summit of the centre marked 1800 (268) in the Argentine map, then through the one marked 2100 (269), and afterwards shall pass through the gorge of Ipela (270), along mounts 1920 (271) and 2260 (272), 1990 (273), 2100 (274), and 2150 (275), and along the line between the slopes of the main range as far as mount Mirador (276), mount Puyehue (277), mount Pantojo (278), mount Esperanza (279), gap of Los Raulies (280), pass Perez Rosales (281), summit of mount Tronador (282); and shall continue along the line between the slopes of the snow-capped mountains which stretch southward separating the river Blanco (283) from the stream feeding lake Fonck, and along the crest of said mountains which separate the slopes in the gap of Christie (284); it shall cut the river Manso in the narrow part (285) of its bend toward the north, and shall continue along the series of snow-capped summits of the main range of the Andes to the east of said river between same and Valle Grande (286); it shall cut river Puelo (287), shall be prolonged further over the main range going through the gorge (288), which separates the sources of the Bodadahue river from those which feed lake Menendez; through the gorge of Navarro (289), continuing southward along the same line of slopes of the central snow-capped chain which feeds the sources of river Corcovado and those of the lacustral system of river Futaleufu; and, passing east of river Frio or Futaleufu along the culminating line of mount Blanco (290), it shall cut river Palena on the line of the mounts Blanco (291) and Serrano (292). It shall continue along the (intersection of the) slopes of the snow-capped chain over mount Morro (293), mount Maldonado (294), mount Puntagudo (295), Nevado del Sur (296), which feeds river La Torre and the western affluents of river Frias; it shall go through the gorge lying east of mount Esperanza (297); it shall cut the river Cisne or Frias in the direction of mount La Torre (298); it shall continue along the line of slopes of the same snow-capped chain which bounds, on the west, lake La Plata in the direction of mount San Clemente (299), of same central chain or main range, cutting the river Aisen or Simpson (300) in the vicinity of

its confluence with rivers Mañihuales and Huemules. From the summit of mount San Clemente, following the general crest of the chain, the boundary line shall continue up to mount San Valentín and thence over the summit line (301) of the slopes of the chain, cutting river Las Heras as far as the gorge marked with No. 1070 (302), in the Argentine map. Thence the line shall continue south-south-east until it strikes the crest of the same snow-capped chain (303) which on the west overlooks lake San Martín, cutting the outflow of same. It shall continue along said crest, passing over mount Fitz Roy (304), the mountains rising in the centre of the glaciers of lake Viedma (305), and the elevated snow-capped crests of the Cordillera up to mounts Geikie (306), indicated in the beginning of this proposal of a general line, which mountains are situated in the line of elevated crests or main range of the Cordillera de los Andes.

From mounts Geikie the divisional line in the Cordillera de los Andes shall run along the same ridge up to the point which the respective Governments may fix as the end of said line, according to the provisions of the last part of Article II. of the Protocol of 1st May, 1893.

Within the points and stretches which he has indicated, the joint Sub-Commissions shall make the demarcation in detail, in pursuance of the provisions of Article 5 of the Instructions issued by the Experts for the demarcation in the Cordillera de los Andes on the 1st January, 1894.

The Experts have drawn up and signed the present Record in two copies.

F. P. MORENO.

DIEGO BARROS ARANA.

ENRIQUE S. DELACHAUX.

ALEJANDRO BERTRAND.



## RECORD OF THE PROCEEDINGS

### OF THE MEETING OF THE ARGENTINE AND CHILIAN EXPERTS, DATED SEPTEMBER 3RD, 1898.

IN the city of Santiago, Chile, on the 3rd day of September, 1898, the undersigned Experts, Don Francisco P. Moreno for the Argentine Republic and Don Diego Barros Arana for the Republic of Chile, having met in order to decide upon the general frontier-line according to the Agreement arrived at in the Meeting of the 1st of May, 1897, and in that which took place in the office of H. E. the President of Chile on the 14th of May last, they respectively made the following statements:

The Chilean Expert stated that he had taken into consideration the proposal of a general frontier-line between the Republic of Chile and the Argentine Republic between parallels  $23^{\circ}$  and  $26^{\circ} 52' 45''$  S. latitude, made by the Argentine Expert in the Conference of the 1st of September, and that he considers it convenient to make the following observations regarding the considerations upon which it had been based:

1. That the expression "traditional boundary," contained in the note of the undersigned dated the 18th of January, 1892, expressly refers to the old boundary existing between Chile and Bolivia before the military occupation of the territory of the Puna de Atacama by Chile as a consequence of the war that broke out in 1879, a fact which had been formerly acknowledged by Expert Pico in the Conference of the 29th of April, 1890.

2. That he acknowledges that if the boundary which before that epoch separated Chile from the Bolivian Puna, say the western limit of the territory that went under said name, were now to be fixed, the line indicated would scarcely deviate from the one the undersigned would lay down in the greater part of its extent.

3. That the Treaty concluded in 1893 between Bolivia and the Argentine Republic, mentioned by the Argentine Expert, allows a western boundary to separate both countries from parallel  $23^{\circ}$  to the extreme northern point of the boundary between Chile and the Argentine Republic, according to the Treaty of 1881.

4. Finally, that a Chilean law of the 12th of July, 1888, has incorporated the territory of La Puna to that of Chile, and that while said law remains in force, the Chilean Expert cannot either accept or propose any line which may be contrary to what said law establishes.

In view of these considerations, he thinks that his intervention in this matter must needs be limited for the moment by the course which the laws of the Republic trace him, and wishing to satisfy the purposes of the Argentine Expert, so that a Record concerning this part of the boundary may be immediately presented to the respective Governments, he proceeds to enumerate, as follows, the points which form the eastern boundary of Chile between parallels  $23^{\circ}$  and  $26^{\circ} 52' 45''$ , as established by the law of the 12th July, 1888 :

Point of intersection of parallel  $23^{\circ}$  S. with the ridge of Incahuasi, mount Pucas or Peñas. River Las Burras (point at ten kilometres, approximately, from Susques) Cortadera gap (road from Susques to Cobre), mount Trancas, wide gap Pasto Chico, mount Negro, to the east of mount Tuler or Tugli, wide gap of Chorrillos, wide gap Colorada (road from Pastos Grandes to San Antonio de los Cobres), opening Del Mojón, opening Las Pircas (road from Pastos Grandes to Poma), mount La Capilla, mount Ciénaga Grande (to the north of the snow-capped peak Cachi), opening of La Cortadera or Del Tolar (road from Pastos Grandes to Molinos), mount Juere Grande, opening of Las Cuevas (road to Encrucijada), opening of Cerro Blanco, mount Blanco, mount Gordo, mount Agua Caliente, snow-capped peak Diamante or Mecara (mount Leon Muerto), gap Vicuñorco, snow-capped peaks Laguna Blanca, Pasto de Ventura gap, mounts Curruto, mount Azul, Robledo, gap, mounts Robledo, gap, San Buenaventura gap, snow-capped peak Negro Muerto, mount Bertrand, Dos Conos (two cones), cone Falso Azufre, San Francisco gap.

The Argentine Expert stated :

That the Record of proceedings of the meeting which both Experts held on the 17th of February of last year provided in its first Article that "the assistants of the joint Sub-Commission shall begin the operations of demarcation referred to in 1st Clause of the Agreement of the 17th April of last year, adhering to the instructions issued by the Experts to the Sub-Commissions of demarcation in the Cordillera de los Andes dated the 1st of January, 1894, extending the work of the zone referred to in said Clause to the whole region which in the opinion of the respective Experts may comprehend the line of demarcation."

That consequently, the assistants of the sixth joint Sub-Commission have proceeded to execute the operations provided in the first base of the Agreement of the 17th April, 1896, fulfilling said instructions, in the mountainous region which is the Cordillera de los Andes, and which formed the "old boundary existing between Chile and Bolivia before the war which began in 1879."

That he cannot accept as part of the general boundary line, and therefore as boundary between parallels  $23^{\circ}$  and  $26^{\circ} 52' 45''$  according to the Treaties and Agreements in force, the line defined by the Chilian Expert, and that he cannot either enter into a discussion on same, because he considers that it is not included within the terms of the Treaty of 1881, Protocol of 1893, and Agreement of 1896.

He declared likewise that the line proposed by the Chilian Expert is a political, and

not a geographical line, such as that which they are entrusted to draw should be, and besides, that it is extraneous to the Cordillera de los Andes, to which the above Treaties and Agreements refer.

Both Experts, in view of the divergence of opinions recorded in the foregoing statements, have resolved to present to their respective Governments a copy of the present Record for ulterior ends.

The Experts have drawn up and signed the present Record in two copies.

F. P. MORENO.

DIEGO BARROS ARANA.

ENRIQUE S. DELACHAUX.

ALEJANDRO BERTRAND.



## RECORDS

SIGNED IN SANTIAGO, CHILE, BY THE ARGENTINE MINISTER DOCTOR NORBERTO PIÑERO  
AND THE MINISTER FOR FOREIGN AFFAIRS OF CHILE, RELATIVE TO THE EXPERTS'  
DIVERGENCES AND TO ARBITRATION.

### FIRST RECORD.

IN the Department for Foreign Affairs of Chile, the Envoy Extraordinary and Minister Plenipotentiary of the Argentine Republic Don Norberto Piñero and the Minister for Foreign Affairs Don Juan José Latorre, duly authorised, having met for the purpose of taking into consideration the Records and antecedents relating to the general frontier-line laid before them by the Experts, and of assuring the faithful execution of the International Treaties and Conventions in force, the Minister for Foreign Affairs declared: That the Government of Chile uphold and sustain in all its parts the general frontier-line presented by their Expert in the Records signed with the Argentine Expert on the 29th of August, 1st and 3rd of September of the current year.

The Minister Plenipotentiary in his turn declared that his Government also uphold and sustain in all its parts the general frontier-line presented by their Expert in the Records referred to.

With the purpose of facilitating the examination of and decisions on all the points comprised in the boundary question, the Ministers agreed to deal separately with each one of its parts, to wit:

A. That relating to the boundary in the region comprehended between parallels 23° and 26° 52' 45" S. lat.

B. That relating to the boundary from parallel 26° 52' 45" to the proximity of parallel 52° S. lat.

C. That relating to the boundary region close to parallel 52° S. which is referred to in the last clause of Article II. of the Protocol of 1893.

In each case they shall begin by reading the Records of the Experts.

With this the Conference ended, two copies of equal tenor of the present Record being signed on the 15th of September of 1898.

N. PIÑERO.

J. J. LATORRE.

## SECOND RECORD.

The Envoy Extraordinary and Minister Plenipotentiary of the Argentine Republic, Don Norberto Piñero and the Minister for Foreign Affairs Don Juan José Latorre, having met in the Department for Foreign Affairs of Chile, and having read the Records of the Experts of the Argentine Republic and of Chile dated the 1st and 3rd of the current month, relative to the boundary between both countries, in the region comprised between parallels 23° and 26° 52' 45" referred to in base 1 of the Agreement of 17th April, 1896, and having examined the lines proposed by said functionaries without being able to arrive at any joint conclusion, they agreed to suspend the consideration of the matter.

In witness whereof they signed the present Record in duplicate on the 17th of September, 1898.

N. PIÑERO.

J. J. LATORRE.

## THIRD RECORD.

The Envoy Extraordinary and Minister Plenipotentiary of the Argentine Republic, Don Norberto Piñero and the Minister for Foreign Affairs Don Juan José Latorre, having met in the Department for Foreign Affairs of Chile and having read the Records of the Experts of the Argentine Republic and of Chile dated the 29th of August and 3rd of September in which said functionaries have set down the line which in the opinion of each of them should separate the Argentine Republic from the Republic of Chile, from parallel 26° 52' 45" S. lat. to the region close to parallel 52°, the following was verified :

1. That the line of the Chilean Expert starts from "Pass San Francisco" and that of the Argentine Expert from "Pirca de Indios."

2. That the lines of both Experts coincide from mount "Tres Cruces" (southern summit) to mount "Perihueico," in the points and stretches marked with numbers 10 to 256 of the Chilean Expert's list, and 3 to 266 of the Argentine Expert's list; and also in the points and stretches marked with numbers 263 to 270 of the Chilean Expert's list, and 275 to 281 of that of the Argentine Expert, and finally in those marked with numbers 331 and 332 by the former, and 304 and 305 by the latter.

3. That the line of the Chilean Expert diverges from that of the Argentine Expert in the points and stretches marked by the former with numbers 1 to 9 and 1 and 2 by the latter; in the points and stretches marked by the former with numbers 257 to 262 and 267 to 274 by the latter; in the points and stretches marked with numbers 271 to 330 by the former, and 282 to 303 by the latter; in the points and stretches marked with numbers 333 to 348 by the former, and with number 306 and the rest of the points without number that follow in the list of the latter, it being recorded that these last points and stretches of

either Expert are the same dealt with in the Record of the 1st of September, relative to the boundary in the region close to parallel 52°.

The Minister Plenipotentiary of the Argentine Republic stated: that in the communication accompanying the antecedents relative to the general Boundary Line, the Argentine Expert affirms that the points and stretches marked by the Chilian Expert with numbers 1 to 9 inclusive, 278 to 330 inclusive, and 333 to 348 also inclusive, are not situated in the Cordillera de los Andes, as ordered by the Treaties and in the form which they establish. Therefore he invites the Government of Chile to reconsider them after a new study of same.

The Minister for Foreign Affairs of Chile replied: that the Chilian Expert had communicated to the Government that the points and stretches just mentioned by the Argentine Minister are situated in the Cordillera de los Andes, as ordered by the Treaties, and in the form which they establish. He would consequently express the desire that the Argentine Minister should not insist on requesting new studies of those points and stretches, and that they should be taken into consideration as the other divergences.

In view of the foregoing contradictory declarations which raise a question that only the Arbitrator can decide, and not having been able to arrive at any direct arrangement, the Minister for Foreign Affairs of Chile and the Envoy Extraordinary and Minister Plenipotentiary of the Argentine Republic agree, in the name of their respective Governments, to remit to that of Her Britannic Majesty a copy of the present Record, of the Records of the Experts which have been read and of the Treaties and International Agreements in force, in order that, subject to base II. of the Agreement dated 17th April, 1896, said Government may decide the divergences which have been recorded above.

Finally they agreed that the above-mentioned documents shall be delivered to the Government of Her Britannic Majesty by the Diplomatic Representatives of the Argentine Republic and of the Republic of Chile accredited to the said Government, who shall manifest to same that, the case foreseen in the above-quoted base II. of the Agreement of the 17th April, 1896, having arisen, they may proceed to appoint the Commission, that is to verify the previous study of the ground and solve all the divergences together and in one decision.

In witness whereof, two copies of the same tenor of the present Record were signed on the 22nd September, 1898.

N. PIÑERO.

J. J. LATORRE.

#### FOURTH RECORD.

The Envoy Extraordinary and Minister Plenipotentiary of the Argentine Republic, Don Norberto Piñero, and the Minister for Foreign Affairs of Chile, Don Juan José Latorre, having met in the Department for Foreign Affairs, and having read the Record of the Experts dated the 1st of the current month of September regarding the line which is



to separate the Argentine Republic from the Republic of Chile in the region close to parallel 52° S. lat. and in view of the same Expert's divergences which appear in said Record, both as to the fact whether the Cordillera de los Andes penetrates or not, totally or partially, into the channels of the Pacific, and as to the divisional line which should be adopted there in order to leave to Chile the coasts of said channels; and no direct understanding having been possible, the Argentine Minister Plenipotentiary and the Minister for Foreign Affairs of Chile, in the name of their respective Governments, agreed to remit to that of Her Britannic Majesty, in the form provided by another Record of this date, a copy of the present one and also of the above-mentioned one of the Experts, in order that subject to base III. of the Agreement of the 17th April, 1896, said Government may decide the divergences cited, and determine the divisional line in the region above-named, the ground being previously studied by the Commission that they will appoint to that effect.

In witness whereof, two copies of equal tenor of the present Record are signed in Santiago on the 22nd of September, 1898.

N. PIÑERO.

J. J. LATORRE.

Buenos Aires, 11th October, 1898.

*The President of the Republic,*

DECREES :

ART. I. Let the Records be approved which determine the divergences raised by the respective Experts on fixing the general frontier line, and which the Governments, on account of their being unable to settle said divergences by a direct understanding, resolve to remit to the Government of Her Britannic Majesty, to the effects of Art. II. of the Agreement of 17th April, 1896, said Records having been signed in Santiago, Chile, under date of 15th, 17th and 22nd September of the current year by the Envoy Extraordinary and Minister Plenipotentiary of the Argentine Republic, Doctor Don Norberto Piñero and the Minister for Foreign Affairs of Chile, Don J. J. Latorre.

II. Let it be communicated, published in the Official Gazette, and inserted in the National Register.

URIBURU.

A. ALCORTA.

## RECORD OF THE PROCEEDINGS

OF THE MEETING OF  
THE ARGENTINE AND CHILIAN EXPERTS,  
DATED OCTOBER 1st, 1898.

IN the city of Santiago, Chile, on the 1st of October, 1898, the undersigned Experts Don Francisco P. Moreno, for the Argentine Republic, and Don Diego Barros Arana, for the Republic of Chile, having met in order to decide upon the general frontier-line according to the agreement arrived at in the Meeting of the 1st of May, 1897, and in that which took place in the office of His Excellency the President of the Republic of Chile, on the 14th of May last, agree as follows :

ART. I. That as it results from the comparison of the general frontier-line presented by the Argentine Expert and set forth in the Record of the 3rd September last, and of the one presented by the Chilian Expert inserted in the Record of the 29th August, that the points and stretches marked in the first with numbers 3 to 266, 275 to 281, 304 and 305, agree with the points and stretches of the second marked with numbers 10 to 256, 263 to 270, 331 and 332, in consequence, they resolve to accept them as forming part of the boundary line in the Cordillera de los Andes between the Argentine Republic and the Republic of Chile.

II. That for the purpose of the practical demarcation of the frontier-line on the ground in those parts where the general lines of both Experts coincide, it is agreed to form four joint Commissions, composed of an assistant on each side corresponding to each one of the present Sub-Commissions 1, 2, 3 and 4, which shall proceed to mark from north to south the indicated points and stretches in the manner directed in the instructions issued for the demarcation on the 1st of January, 1894, drawing up the corresponding Record.

III. In the points which may have been proposed by only one of the Experts, the respective assistant shall propose the location according to his maps or to the data which he may deem convenient; if the point should be accepted by his colleague, the landmark shall be placed as in the foregoing case. In the contrary case, the difference of opinion shall be recorded and the work continued.

IV. The demarcating Commissions may also by joint agreement erect landmarks in the

intermediary points of the accepted delimitation, proceeding as in the foregoing cases if previously proposed by any of the assistants composing same.

V. The definite landmarks shall consist of large stones, of cement and stone, or of iron, as may be previously and jointly established by the Experts or their assistants, duly authorised, taking into account the conditions of each locality, and every landmark shall have a minimum height of three metres.

VI. As soon as the Experts shall have communicated to each other the designation of the respective Commissions, the latter shall enter into direct communication, in order to fix the date on which they are to meet for the purpose of beginning their work.

VII. The first joint Sub-Commission shall begin the demarcation at the point marked 3 and 10 respectively in the general Argentine and Chilian lines, the second Sub-Commission shall begin at the point marked with numbers 114 and 118 of same, the third Sub-Commission at the point marked 161 and 155, and the fourth one at the point marked with numbers 251 and 238.

The Experts have drawn up and signed the present Record in two copies.

F. P. MORENO.

CLEMENTE ONELLI.

DIEGO BARROS ARANA.

ALEJANDRO BERTRAND.



## RECORDS

SIGNED AT SANTIAGO RELATING TO THE DEMARCATION OF THE  
BOUNDARY BETWEEN PARALLELS 23° AND 26° 52' 45".

IN the city of Santiago, Chile, on the 2nd day of November, 1898, Señores Alberto Blancas, Chargé d'Affaires and Plenipotentiary *ad hoc* of the Argentine Republic, in accordance with telegraphic credentials which will be subsequently ratified in due form, and Juan José Latorre, Minister for Foreign Affairs, having met at the office of the said Minister, said :—that the Governments of the Argentine Republic and of the Republic of Chile, being desirous to arrive at an agreement upon all matters affecting, or likely to affect the two countries, whether directly or indirectly, thus establishing in a complete, sincere and amicable manner, the relations which the glories they had shared in common imposed upon them from the very commencement of their political emancipation, they agreed :

1. To hold a Conference at the city of Buenos Aires for the following purposes :
  - (a) To trace the divisory line between parallels 23° and 26° 52' 45" S. lat. in fulfilment of what was established in the 1st basis of the Agreement of April 17, 1896, and taking into consideration all the documents and antecedents relating thereto.
  - (b) To examine and formulate a suitable settlement of such matters as may directly or indirectly interest the two countries, and which should be expressly submitted to their deliberations.
2. The Conference is to be composed of ten Delegates, five to be designated by the Argentine Republic and five by the Republic of Chile. The selection of the Delegates to be made by each Government, and the fixing of the date in which the Conference will meet are to form the subject of a subsequent Record.
3. The Conference shall begin by dealing with the first point referred to in Article I. Should the Delegates arrive at an agreement upon the said point, whether unanimously or by a majority, the divisory line so agreed upon shall be considered as definitively traced, and shall be immediately communicated to the two Governments, in order that, cognizance of the same having been given to the Government of Bolivia, steps be taken to fix boundary landmarks in the ground at such points of the said line as may be deemed necessary. Should the Delegates not arrive at an agreement, they shall advise their respective

Governments, in order that effect should be given to the procedure laid down in another Record of this date.

4. The conditions of the preceding Article once complied with, the Conference shall proceed to deal with the other points to which Article I. refers. The resolutions of the Delegates will not be binding upon the respective Governments, but once communicated to the Governments, they must pronounce upon those resolutions in a definitive manner.

5. The work of the Conference must be finished within ten days from their first sitting, unless the Governments should, by mutual agreement, decide to prolong that period.

6. Should the Conference, after three sittings, not have determined the line between parallels 23° and 26° 52' 45" S. lat., the Demarcating Commission referred to in the Record of this date shall enter upon the fulfilment of its mission.

In witness whereof, the undersigned, on behalf of their respective Governments, sign the present Agreement in duplicate, one for each party, and affix their seals thereto.

(L.S.) ALBERTO BLANCAS.

(L.S.) J. J. LATORRE.

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In the city of Santiago, Chile, on the 2nd day of November, 1898, Señores Alberto Blancas, Chargé d'Affaires and Plenipotentiary *ad hoc* of the Argentine Republic, in accordance with telegraphic credentials which will be subsequently ratified in due form, and Juan José Latorre, Minister for Foreign Affairs, having met at the office of the said Minister, for the purpose of continuing the Meeting referred to in the Record of September 17 last, agreed, after an exchange of views:

1. To appoint one Argentine and one Chilian Delegate, together with the present Minister of the United States of North America accredited to the Argentine Republic, in order that, in the capacity of demarcators and taking into account the documents and antecedents of the question, they should proceed, by a majority, to trace in a definitive manner the divisory line referred to in Article I. of the Agreement of April 17, 1896.

2. The divisory line once traced, the Demarcating Commission shall give cognizance of the same to the respective Governments, in order that it be communicated to the Government of Bolivia, and that steps be taken to fix boundary landmarks in the ground, at such points of the said line as may be deemed necessary.

3. The Demarcating Commission shall meet in the city of Buenos Aires and shall enter upon the fulfilment of its mission forty-eight hours after the respective Governments have informed their members that the case foreseen in the Agreement of this same date, has arisen. The demarcation of the divisory line is to be finished three days after the first sitting.

4. Should there be any disagreement as to the decision adopted, the dissenting member may put the same on record by signing as such, but he shall not express his reasons.

In witness whereof, the undersigned, on behalf of their respective Governments, sign the present Agreement in duplicate, one for each party, and affix their seals thereto.

(L.S.) ALBERTO BLANCAS.

(L.S.) J. J. LATORRE.

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In the city of Santiago, Chile, on the 25th day of November, 1898, at a meeting held at the office of the Minister for Foreign Affairs between Señores Alberto Blancas, Chargé d'Affaires and Plenipotentiary *ad hoc* of the Argentine Republic, according to a Power to be hereinafter inserted, and Juan José Latorre, Minister of that Department, for the purpose of executing the stipulations contained in the Records of the 2nd of the present months, the Chargé d'Affaires, and Plenipotentiary *ad hoc* of the Argentine Republic declared that H. E. the President of the Argentine Republic appoints as Delegates of the Government of the Argentine Republic at the Conference to be held in Buenos Aires, in conformity with the stipulations of the first of the said Records, Señores Bernardo de Yrigoyen, Bartolomé Mitre, Juan José Romero, José E. Uriburu and Benjamín Victorica.

The Minister for Foreign Affairs declared, on his part, that H. E. the President of the Republic appoints as Delegates, Señores Eulio Altamirano, Rafael Balmaceda, Enrique MacIver, Eduardo Matte and Luis Pereira.

They likewise agreed that the first sitting of the Conference at Buenos Aires shall take place on the 1st day of March of next year, 1899.

It was finally agreed that should the Conference, after three sittings, not have determined the line between parallels 23° and 26° 52' 45" S. lat., being thereby necessary for the Demarcating Commission, to which the second of the above-mentioned Records refers, to enter upon the fulfilment of its mission, the Argentine Delegation and the Chilean Delegation shall each appoint one of their members, in order that, conjointly with the present Minister Plenipotentiary of the United States of America to the Argentine Republic, they should proceed to effect the delimitation in the manner laid down in the 2nd Record.

The power authorising Señor Blancas is as follows:—

“Julio A. Roca, Constitutional President of the Argentine Republic, by these presents authorises the Chargé d'Affaires *ad interim* of the Argentine Republic in Chile, Doctor Alberto Blancas, to sign the Records relative to the holding of the Conference of Delegates which are to meet in the city of Buenos Aires for the purpose of seeking the means for settling the questions pending between the two countries as to their boundaries.”



"The present Power shall be countersigned by the Minister for Foreign Affairs. (Signed) *Julio A. Roca*. (Signed) *Amancio Alcorta*. Given at Buenos Aires on the 29th day of October, 1898."

In witness whereof the undersigned, on behalf of their respective Governments, sign the present Agreement in duplicate, one for each party, and affix their seals thereto.

(L.S.) ALBERTO BLANCAS.

(L.S.) J. J. LATORRE.

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At Santiago, Chile, on the 2nd day of February, 1899, at a meeting held at the office of the Minister for Foreign Affairs, between Señores Alberto Blancas, Chargé d'Affaires *ad interim* and Plenipotentiary *ad hoc* of the Argentine Republic, and Ventura Blanco, Minister of that Department, the latter stated that Señor Rafael Balmaceda, one of the five Delegates of the Chilian Government to the Buenos Aires Conference, mentioned in the Record of November 25 of last year, has relinquished his said functions owing to ill-health, and that H.E. the President of the Republic has been pleased to appoint Señor Julio Zegers in his place.

In witness whereof, the undersigned, on behalf of their respective Governments, sign the present Agreement in duplicate, one for each party, and affix their seals thereto.

(L.S.) ALBERTO BLANCAS.

(L.S.) V. BLANCO.

## CONFERENCE OF BUENOS AIRES.

FIRST SITTING. (1ST MARCH, 1899.)

(Under the Presidency of Señor BARTOLOMÉ MITRE.)

AT Buenos Aires, at three P.M. of the 1st day of March, 1899, a meeting was held, at the Reception Hall of the Government House, of the Delegates to the International Conference, mentioned in the Records signed at Santiago on November 25, 1898, and February 2, 1899, namely: Señores Bernardo de Yrigoyen, Bartolomé Mitre, Juan José Romero, José E. Uriburu and Benjamín Victorica, on behalf of the Argentine Republic; and Euliojio Altamirano, Enrique MacIver, Eduardo Matte, Luis Pereira and Julio Zegers, on behalf of the Republic of Chile.

The Conference declared themselves constituted; and then the Delegate Señor Mitre submitted to their consideration a draft of Regulations, which were unanimously approved, as follows :—

ART. I. The Delegates constitute a body which discusses in common, and decides, by a majority of votes, the questions submitted to it in accordance with the Record of November 2, 1898, signed at Santiago by the Governments of the Republic of Chile and of the Argentine Republic.

II. The *quorum* is to consist of the ten Delegates assembled in Conference, and the absence of a single one of them prevents any deliberation and any valid decision.

III. There shall be two Presidents who will alternately take the chair.

IV. There shall be two Secretaries appointed by the respective Delegations, who are to act in common.

V. The sittings shall be private, and their deliberations and decisions shall be kept secret.

VI. A minute, which shall be signed by the Presidents and Secretaries, shall be drawn up at each sitting.

VII. Only the concrete proposals and Resolutions are to appear upon the Minutes, record being made of their formulas and their results, either in case of agreement or

disagreement, according to the number of votes, omitting any nominal designation of those, unless any of the Delegates should demand it.

VIII. The days for sitting shall be fixed by common agreement.

The election of Presidents was then proceeded with, the result being : Señor Altamirano by nine votes against one obtained by Señor Zegers, and Señor Mitre by nine votes against one obtained by Señor Yrigoyen.

The following were unanimously appointed Secretaries : Señor Marcial A. Martinez de Ferrari for the Chilian Delegation, and Señor Manuel Augusto Montes de Oca for the Argentine Delegation.

It was agreed that this sitting, over which Señor Mitre presided, should be considered as the first of the three referred to in Article VI. of the Record of November 2, 1898, and that the second should take place on such day as the President might designate.

The sitting terminated at 4.30 p.m.

BARTOLOMÉ MITRE.	E. ALTAMIRANO.
M. A. MARTINEZ DE F.	M. A. MONTES DE OCA.

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#### SECOND SITTING. (9TH MARCH, 1899.)

(Under the Presidency of Señor EULOJIO ALTAMIRANO.)

At Buenos Aires, at three P.M. of the 9th day of March, 1899, a meeting was held, at the Reception Hall of the Government House, of the Delegates to the International Conference, mentioned in the Records signed at Santiago on November 25, 1898, and February 2, 1899, namely : Señores Bernardo de Yrigoyen, Bartolomé Mitre, Juan José Romero, José E. Uriburu and Benjamín Victorica, on behalf of the Argentine Republic ; and Eulojio Altamirano, Enrique MacIver, Eduardo Matte, Luis Pereira and Julio Zegers, on behalf of the Republic of Chile.

Señor Eulojio Altamirano presided, in conformity with Art. III of the Regulations.

The Minute of the preceding sitting was read and approved.

It was agreed to place on record that the Delegates have held four confidential meetings for the purpose of tracing the divisory line between Chile and the Argentine Republic, in the Cordillera de los Andes, from parallel 23° to that of 26° 52' 45" S. lat., and that, after having discussed the said line in its various aspects, no agreement had been arrived at. It was likewise agreed to place on record that at these meetings various proposals of a conciliatory character were formulated, which were not accepted.

The Delegates again exchanged ideas respecting the manner of tracing the divisory



line in the Cordillera de los Andes between parallels  $23^{\circ}$  and  $26^{\circ} 52' 45''$  S. lat., insisting in the purposes already advanced.

Señor Altamirano proposed the adoption of the following line :—Point of intersection of parallel  $23^{\circ}$  S. with the ridge of Incahuasi, mount Pucas or Peñas, river las Burras (a point at 10 kilometres approximately from Susques), opening Cortadera (road from Susques to Cobre), mount Trancas, opening Pasto Chico, mount Negro, to the east of mount Tuler or Tugli, opening of Chorrillos, opening Colorado (road from Pastos Grandes to San Antonio de los Cobres), opening del Mojón, opening las Pircas (road from Pastos Grandes to Poma), mount la Capilla, mount Ciénaga Grande (to the north of the snow-capped peak Cachi), opening of the Cortadera or del Tolar (road from Pastos Grandes to Molinos), mount Juere Grande, opening of Las Cuevas (road to Encrucijada), opening of mount Blanco, mount Blanco, mount Gordo, mount Agua Caliente, snow-capped peak Diamante or Mecara (mount Leon Muerto), Vicuñorco pass, snow-capped peak Laguna Blanca, pass of Pasto de Ventura, mount Curuto, mount Azul, Robledo pass, Robledo mount, pass of San Buenaventura, snow-capped peak Negro Muerto, mount Bertrand, Dos Conos, mount Falso Azufre, Pass of San Francisco.

Señor Yrigoyen, on his part, proposed this other draft resolution, accompanied by a plan :—The Cordillera de los Andes, between parallels  $23^{\circ}$  and  $26^{\circ} 52' 45''$ , is that which contains the mounts and volcanoes Licancaur, Honar, Potor, Lascar, Aguas Calientes, Miñiques, Capur, Pular, Salinas, Socompa, Tecar, Llullaillaco, Azufre, Bayo, Agua Blanca, Morado, Peinado Falso, Laguna Brava, Juncalito, Juncal or Wheelwright, and Tres Cruces. In the said Cordillera the frontier line will run along the following points : The intersection of parallel  $23^{\circ}$  with the anticlinal line at its highest concatenation, which intersection will serve as the point of departure (No. 1 on the plan), mount Honar (4), where the line arrives, passing between mounts Niño and Putana, situated to the east, and an unnamed volcano, mount Áspero, Bordos Colorados, and, at some distance, Zarzo and Zapa to the west (2 and 3). From the Honar the line shall continue along the edge or crest as far as mount Potor (5), opening of Potor (6), mount Colache (7), mount Abra Grande (8), mount Volcán (9), Barrial (10), mount Lejía (11), mount Overo (12), mount Agua Caliente (13), mount Puntas Negras—to the south of Agua Caliente—(14), rising ground Laguna Verde (15), mount Miñiques (16), Puntas Negras (17), mount Cozor (18), Media Luna de Cozor (19), mount Capur (20), mount Cobos (21), ridge from Capur to the opening of Pular (22, height 4740 metres); thence by the crest to mount Pular (23), and the height immediately to the south (24, height 4780 metres), mount Salina (25), rising ground of the east of the Socompa opening (26, height 4380 metres), rising ground Del Oeste (27), mount Socompa (28), point immediately to the south (29, height 4240 metres), mount Socompa Carpis (30), mount Tecar (31), principal points of the ridge of mountains between Tecar and mount Inca (32, 33, 34 and 35), mount Inca (36), mount Zorra Vieja (37, height 4440 metres), mount Llullaillaco (38), Llullaillaco pass (39, height 4920 metres), Corrida de Cori (40), volcano Azufre or Lastarria (41), ridge from Azufre or Lastarria up to mount Bayo (42, 43, 44, 45, 46 and 47), a spot to the south of mount Bayo (48, height 4970 metres), mount Agua de la Falda (49), mounts Aguas Blancas (50),

mount Parinas (51), mount Morado (52), mount Del Medio (53), mount Peinado Falso (54), station XXVI. of the Argentine Commission situated to the east of a pass (55, height 4997 metres), a mount to the south-west (56, height 5134 metres), mount Laguna Brava West (57), mount Juncalito I. (58), mount Juncalito II. (59), Juncal or Wheelwright (60), and Pirca de Indios at the foot of Juncal or Wheelwright (61), which will be prolonged to Cenizo and Tres Cruces in the general direction of the chain.

The projects formulated by Señores Altamirano and Yrigoyen were successively put to the vote, and both were rejected by five votes against five.

It was unanimously agreed, in consequence, that each Delegation should communicate this result to their Government, in compliance with the provision contained in the last paragraph of Article III. of the Record of November 2, 1898, and that communication should be made, in a similar manner, that the Argentine Delegation had appointed Señor José E. Uriburu, and the Chilian Delegation Señor Enrique MacIver, in order that, conjointly with the present Minister Plenipotentiary of the United States of America to the Argentine Republic, they should proceed to carry out the delimitation in the manner prescribed in the second Record of the same date, November 2, 1898.

The sitting thereupon ended, this minute being approved.

EULOJIO ALTAMIRANO.

BARTOLOMÉ MITRE.

M. A. MARTINEZ DE FERRARI.

M. A. MONTES DE OCA.

## RECORDS

REFERRING TO THE DEMARCATION OF THE BOUNDARIES  
OF THE PUNA DE ATACAMA.

IN Buenos Aires, on the 21st day of March, 1899, at the Legation of the United States of America, at 3 P.M., the Demarcating Commission, composed of the following gentlemen—Doctor José E. Uriburu, on the part of the Argentine Republic, Señor Enrique MacIver, on the part of the Republic of Chile, and Mr. William I. Buchanan, Envoy Extraordinary and Minister Plenipotentiary of the United States of America in the Argentine Republic—met forty-eight hours after having received from the respective Governments communications to the effect that the Conference of the Argentine and Chilian Delegates had been unable to come to any agreement in regard to the tracing of the dividing line between parallel  $23^{\circ}$  and parallel  $26^{\circ} 52' 45''$  S. lat., in conformity with what was established in the first Record of November 2, 1898; and they decided :—

1. To appoint as Secretaries of the Demarcating Commission, Señor Juan S. Gomez, Señor Marcial Martinez Ferrari and Mr. François S. Jones.

2. That the first sitting of the Commission, which began yesterday, would be considered to terminate on this date, and that the three days to which Article III. of the second Record of November 2, 1898, refers would begin to count from to-morrow.

The first sitting thus terminated, and they appointed the following day, 22nd inst., at 3 P.M., for the second sitting.

JOSÉ E. URIBURU.      ENRIQUE MACIVER.      WILLIAM I. BUCHANAN.

JUAN S. GOMEZ.      M. MARTINEZ FERRARI.      FRANÇOIS S. JONES.

(Secretaries.)

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In Buenos Aires, on the 22nd day of March, 1899, there met at 3 P.M., at the Legation of the United States of America, in accordance with the resolution taken at the first sitting, the members of the Demarcating Commission, Doctor José E. Uriburu, on behalf of



the Argentine Republic, Señor Enrique MacIver, on behalf of the Republic of Chile, and Mr. William I. Buchanan, Envoy Extraordinary and Minister Plenipotentiary of the United States of America in the Argentine Republic, for the purpose of continuing their mission, and decided upon the following course:—

1. To address to the Governments of the Argentine Republic and of Chile, through the Minister for Foreign Affairs of the Argentine Republic, and through the Chilean Minister accredited to this Government, the following note:

“Demarcating Commission, Buenos Aires, March 22, 1899.—Your Excellency, For the purpose of preventing any difficulty which may hereafter arise concerning the exact point of the parallel  $26^{\circ} 52' 45''$ , from which this Commission has been called upon to trace a dividing line towards the north, the Commission desire to know if the Argentine Government (Chilian Government) understand that the point of intersection of the parallel  $26^{\circ} 52' 45''$  with the line to be fixed, is submitted to the Arbitration of Her Britannic Majesty's Government as well as to this Demarcating Commission.

“Praying that Your Excellency will be pleased to favour us with a reply before 3 P.M. to-morrow, we have the honour to be, with the highest consideration, your Excellency's obedient servants.”

2. To charge the Secretaries of the Commission to call on the Minister for Foreign Affairs of the Argentine Republic, and on the Chilean Minister in the Argentine Republic, to request them to agree upon one of the maps presented by the respective Governments to the Commission, in order to trace on the same the dividing<sup>d</sup> line which the Commission has been charged to fix.

The sitting then rose, having decided to hold their next meeting on the following day, the 23rd inst. at 3 P.M.

JOSÉ E. URIBURU.      ENRIQUE MACIVER.      WILLIAM I. BUCHANAN.

JUAN S. GOMEZ.      M. MARTINEZ FERRARI.      FRANÇOIS S. JONES.

(Secretaries.)

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At Buenos Aires, at three P.M. of the 23rd day of March, 1899, a meeting was held at the United States Legation, as agreed in the second sitting, of the members of the Demarcating Commission, Señores José E. Uriburu, representing the Argentine Republic, Enrique MacIver, that of Chile, and William I. Buchanan, Envoy Extraordinary and Minister Plenipotentiary of the United States of America to the Argentine Republic, for the purpose of continuing their mission the replies received from the Minister for Foreign Affairs of the Argentine Republic and the Chilean Minister, to the question asked by this

Commission in its note under date of the 22nd inst., and inserted in the previous minute, being read. These were as follows:—

“Argentine Republic, Department for Foreign Affairs, Buenos Aires, March 23rd, 1899. To the Members of the Demarcating Commission.—In reply to the communication under yesterday's date from the members of the Demarcating Commission, I have the honour to inform you that the Argentine Government understand that the parallel  $26^{\circ} 52' 45''$  is the northern limit of the divergences submitted to the Arbitration of Her Britannic Majesty, and that between said parallel and that of  $23^{\circ}$  S. lat., at its intersection with the Cordillera de los Andes, the Demarcating Commission shall trace the boundary line mentioned in Article I. of the Agreement of April 17, 1896. I take advantage of this opportunity to assure the members of the Demarcating Commission of my most distinguished consideration.—(Signed) *A. Alcorta.*”

“Chilian Legation, Buenos Aires, March 23rd, 1899. To the Demarcating Commission.—In answer to the Note of yesterday's date from the Hon. Commission, I beg to state in the name of my Government, that Her Britannic Majesty's Government shall settle the boundary line from parallel  $26^{\circ} 52' 45''$  to the south, and that the Commission shall trace the line from said parallel towards the north. It is very possible that Her Britannic Majesty's Government may fix a starting point different from that determined by the Commission, but should this occur the points of departure of such lines shall be united by the said parallel  $26^{\circ} 52' 45''$ . I have the honour to remain, yours truly (Signed) *Enrique de Putron.*”

The sitting then rose, the next meeting being fixed for the following day at 10 A.M.

JOSÉ E. URIBURU.      ENRIQUE MACIVER.      WILLIAM I. BUCHANAN.

JUAN S. GOMEZ.      MARCIAL MARTINEZ FERRARI.      FRANÇOIS S. JONES.  
(*Secretaries.*)

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At Buenos Aires, at ten A.M. of the 24th day of March, 1899, a meeting was held at the United States Legation, as agreed on the third sitting, of the members of the Demarcating Commission, Señores José E. Uriburu representing the Argentine Republic, Enrique MacIver that of Chile, and William I. Buchanan, Envoy Extraordinary and Minister Plenipotentiary of the United States to the Argentine Republic, for the purpose of continuing their mission.

Señor Uriburu proposed the tracing of the boundary line between the Argentine Republic and Chile along the following points:—

The Cordillera de los Andes between parallels  $23^{\circ}$  and  $26^{\circ} 52' 45''$  is that which



contains the mounts and volcanoes Licancaur, Honar, Potor, Lascar, Aguas Calientes, Miñiques, Capur, Pular, Salinas, Socompa, Tecar, Llullaillaco, Azufre, Bayo, Agua Blanca, Morado, Peinado Falso, Laguna Brava, Juncalito, Juncal or Wheelwright.

In the said Cordillera the frontier line will run along the following points, the intersection of parallel  $23^{\circ}$  with the anticlinal line at its highest concatenation, which intersection will serve as the point of departure (No. 1 of the plan).

Mount Honar (4), where the line arrives, passing between mounts Niño and Putana, situated to the east, and an unnamed volcano, mount Áspero, Bordos Colorados, and, at some distance, Zarzo and Zapa to the west (2 and 3).

From the Honar the line shall continue along the edge or crest as far as mount Potor (5), opening of Potor (6), mount Colache (7), mount Abra Grande (8), mount Volcán (9), Barrial (10), mount Lejía (11), mount Overo (12), mount Agua Caliente (13), mount Puntas Negras (to the south of Agua Caliente, 14), rising ground Laguna Verde (15), mount Miñiques (16), Puntas Negras (17), mount Cozor (18), Media Luna de Cozor (19), mount Capur (20), mount Cobos (21), ridge from Capur to the opening of Pular (22, height 4740 metres); thence by the crest up to mount Pular (23), and the height immediately to the south (24, height 4780 metres), mount Salina (25), rising ground of the east of the opening Socompa (26, height 4380 metres), rising ground del Oeste (27), mount Socompa (28), point immediately to the south (29, height 4240 metres), mount Socompa Carpis (30), mount Tecar (31), principal points of the ridge of mountains between Tecar and mount Inca (32, 33, 34 and 35), mount Inca (36), mount Zorra Vieja (37, height 4440 metres), mount Llullaillaco (38), Llullaillaco pass (39, height 4920 metres), Corrida de Cori (40), volcano Azufre or Lastarria (41), ridge from Azufre or Lastarria up to mount Bayo (42, 43, 44, 45, 46 and 47), a spot to the south of mount Bayo (48, height 4970 metres), mounts Aguas de la Falda (49), mounts Aguas Blancas (50), mount Parinas (51), mount Morado (52), mount del Medio (53), mount Peinado Falso (54), Station XXVI. of the Argentine Commission, situated to the east of a pass (55, height 4997 metres) a mount to the south-west (56, height 5134 metres), mount Laguna Brava West (57), mount Juncalito I. (58), mount Juncalito II. (59), Juncal or Wheelwright (60), Pirca de Indios at the foot of Juncal or Wheelwright (61).

In his turn Señor MacIver proposed to trace the same line along the following points:—

Point of intersection of parallel  $23^{\circ}$  S. with the ridge Inca-Huasi, mount Pucas or Peñas, river las Burras (a point at 10 kilometres approximately from Susques), opening Cortadera (road from Susques to Cobre), mount Trancas, opening Pasto Chico, mount Negro to the east of mount Tuler or Tugli, opening of Chorillos, opening Colorado (road from Pastos Grandes to San Antonio de los Cobres) opening del Mojón, opening las Pircas (road from Pastos Grandes to Poma), mount la Capilla, mount Ciénaga Grande (to the north of the snow-capped peak Cachi), opening of the Cortadera or del Tolar (road from Pastos Grandes to Molinos), mount Juere Grande, opening of las Cuevas (road to Encrucijada), opening of mount Blanco, mount Blanco, mount Gordo, mount Agua Caliente, snow-capped peak Diamante or Mecara, (mount León Muerto), Vicuñorco pass, snow-capped peak



Laguna Blanca, pass of Pasto de Ventura, mount Curuto, mount Azul, Robledo pass, Robledo mount, San Buenaventura pass, snow-capped peak Negro Muerto, mount Bertrand, Dos Conos, mount Falso Azufre, pass of San Francisco.

Being considered, these propositions were both rejected; the former by the votes of Señores Buchanan and MacIver, and the second by the votes of Señores Buchanan and Uriburu.

Mr. Buchanan proposed the boundary line to be traced in the following manner:—A straight line from the intersection of parallel  $23^{\circ}$  with the 67th meridian as far as the summit of mount Rincón.

This proposition was approved by the votes of Señores Buchanan and MacIver, Señor Uriburu dissenting. He subsequently proposed another straight line from the summit of mount Rincón up to the summit of the Socompa volcano. Señor MacIver proposed, in lieu of the above, another line, which, starting from the summit of mount Rincón, should reach mount Macón. These propositions being voted upon, that of Señor MacIver was rejected by the votes of Señores Buchanan and Uriburu and that of Mr. Buchanan was approved by the votes of Señores Buchanan and Uriburu, Señor MacIver dissenting. Mr. Buchanan then proposed that the boundary line should run from the summit of Socompa volcano to the point known on the Argentine maps as Aguas Blancas, along the points and stretches called Socompa volcano—a point marked 29 in the Argentine Expert's proposal, as stated in the Record drawn up at Santiago, Chile, on September 1, 1898—mount Socompa Carpis, mount Tecar, principal point of the ridge of mountains between Tecar and mount Inca, mount Inca, mount Zorra Vieja, mount Llullaillaco, Llullaillaco pass, point marked 39 in the aforesaid proposal, Corrida de Cori, volcano Azufre or Lastarria, ridge of Azufre or Lastarria up to mount Bayo, point to the south of mount Bayo, 48 in the said proposal, mount del Agua de la Falda, mount Aguas Blancas. This line was approved by the votes of Señores Buchanan and Uriburu, Señor MacIver dissenting. Mr. Buchanan then proposed, as a continuation of the boundary line, a straight line which starting from the summit of mount Aguas Blancas should reach the summit of mounts Colorados. This proposition was voted upon and approved by Señores Buchanan and MacIver, Señor Uriburu dissenting. Mr. Buchanan then proposed another straight line from the summit of mounts Colorados to the summit of mount Lagunas Bravas. This proposition was approved by the votes of Señores Buchanan and Uriburu, Señor MacIver dissenting.

As a continuation of the dividing line, Mr. Buchanan projected another straight line from the summit of mounts Lagunas Bravas up to the summit of the so-called Sierra Nevada in the Argentine map, and estimated on the same at a height of 6400 metres. This proposition, having been put to the vote, was approved by Señores Buchanan and Uriburu, Señor MacIver dissenting. Finally Mr. Buchanan proposed, as completion of the demarcation, a straight line, which, starting from the last point indicated, should reach to such point on parallel  $26^{\circ} 52' 45''$  as the Government of Her Britannic Majesty—in conformity with the Record of September 22, 1898, signed at Santiago, Chile, by the Minister for Foreign Affairs of that Republic, and by the Envoy Extraordinary and

Minister Plenipotentiary of the Argentine Republic—should fix upon as dividing point, on said parallel, between the two countries. This last proposition was unanimously approved.

Consequently the boundary line between the Argentine Republic and the Republic of Chile, which, in accordance with the second Record of November 2, 1898, this Demarcating Commission was to fix between parallels  $23^{\circ}$  and  $26^{\circ} 52' 45''$  S. lat., is determined as follows:—

From the intersection of parallel  $23^{\circ}$  with the 67th meridian, a straight line up to the summit of mount Rincón, and another straight line from the summit of mount Rincón to the summit of the Socompa volcano. The divisory line shall be continued from the summit of the Socompa volcano up to the place called Aguas Blancas in the Argentine maps, along the points and stretches called Secompa volcano, a point marked 29 in the Argentine Expert's proposal—as stated in the Record drawn up in Santiago, Chile, on September 1, 1898—mount Socompa Carpis, mount Tecar, the principal point of the ridge of mountains between Tecar and mount Inca, mount Inca, mount Zorra Vieja, mount Llullaillaco, Llullaillaco pass, point marked 39 in the aforesaid proposal, Corrida de Cori, volcano Azufre or Lastarria, ridge of Azufre or Lastarria up to mount Bayo, point to the south of mount Bayo (48 in the said proposal), mount del Agua de Falda, mount Aguas Blancas. As continuation of the dividing line a straight line, which, starting from the summit of mount Aguas Blancas, should reach the summit of mounts Colorados, thence another straight line from the summit of mounts Colorados to the summit of mounts Lagunas Bravas, and another straight line from the summit of mounts Lagunas Bravas up to the summit of the so-called Sierra Nevada in the Argentine map, and estimated on the same map at a height of 6400 metres. Finally a straight line, which, starting from the last point indicated, should reach to such a point on parallel  $26^{\circ} 52' 45''$  as the Government of Her Britannic Majesty—in conformity with the Record of September 22, 1898, signed at Santiago, Chile, by the Minister for Foreign Affairs of that Republic and by the Envoy Extraordinary and Minister Plenipotentiary of the Argentine Republic—should fix upon as dividing point on said parallel between the two countries.

In witness whereof the Members of the Demarcating Commission agreed to sign the Argentine map to which reference is made in the present Record.

Upon this the Commission declared its mission fulfilled, and that the contents of this Record should be brought to the knowledge of both Governments.

JOSÉ E. URIBURU.      ENRIQUE MACIVER.      WILLIAM I. BUCHANAN.

JUAN S. GOMEZ.      MARCIAL MARTINEZ FERRARI.      FRANÇOIS S. JONES.

(Secretaries.)

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